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NINETEENTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

AND

VITAL STATISTICS

OF THE

COMMONWEALTH OF PENNSYLVANIA.

VOL. II.

TRANSMITTED TO THE GOVERNOR DECEMBER 7, 1903.

WM. STANLEY RAY,
STATE PRINTER OF PENNSYLVANIA.
1904.



LIBERTY AND JUSTICE

3. SPECIAL SOURCES OF DISEASE.

CONTAMINATION OF WATER SUPPLY OF ALTOONA.

Letter to the Altoona Board of Health.

Altoona, Pa., July 15, 1903.

Mr. S. B. Trees, Secretary Board of Health:

Dear Sir: I have been instructed by the board of water commissioners to call the attention of your board to the unsanitary conditions existing on the Baker stream just above the culvert at Kittanning Point. There is a stable containing two horses in close proximity to the stream referred to; also a pig pen. Our watchman at Kittanning Point will show your officer where this place is located.

Trusting that you will give this matter prompt attention, I beg to remain,

Respectfully,
C. B. CAMPBELL,
Secretary.

LETTER REFERRING CONTAMINATION OF WATER SUPPLY OF ALTOONA TO STATE BOARD OF HEALTH.

Altoona, Pa., July 21, 1903.

Benjamin Lee, M. D., Secretary State Board of Health:

Dear Sir: Enclosed find report of health officer on contamination of water supply. I have been directed to refer it to you and ask you to take prompt action on this as it concerns our water supply for the city.

Very truly yours,
SAM'L B. TREES,
Secretary Board of Health.

REPORT OF INSPECTION AT KITTANNING POINT ON ACCOUNT OF POLLUTION OF WATER SUPPLY OF ALTOONA.

Altoona, July 18, 1903.

President and Members of Board of Health:

Gentlemen: I present this my report of inspection of complaint made to this office July 15, 1903, by the water department as per communication attached.

I visited Kittanning Point July 18, 1903, and find some contamination of stream arising from the first cause mentioned in communication from the board of water commissioners, by a man named C., who is keeping two horses in an old building which is not fit for anything to be kept in and he is throwing the manure from inside of the stable onto the ground outside, both stable and manure pile being within fifty feet of the Baker stream and in direct line with the water shed, all drainage from stable and manure pile runs into the stream. Mr. C. was not at home, neither were the horses in the stable when I was there, but would return in a day or two. Left notice for him that stable and horses and manure must be removed within five days.

Found two closets belonging to two houses in the water shed, about 200 feet from stream. Both are full and one was running over on to the ground and contents would wash into stream when raining. These belong to the Altoona Coal and Coke Company, and I have notified them to have the closets cleaned and the one that was running out repaired so as to make it water tight. The surroundings of the tenant houses are fairly good in sanitation. The upper house is a double house with five people living in it and kept very clean. The lower house is a triple house with possibly fifteen people living in it, mostly foreigners, but not kept as clean as the other house, except the family who lives in the lower part, which is very clean.

I would also recommend that the water commissioners reconstruct a dam along the stream that was washed out some years ago, as the dam referred to, when it was in use, carried all the water of the stream along these houses into one water course. As it is now there are two water courses along these, with high ground between and by having one course there is not nearly so much opportunity of contamination as with two. Also that they take some action to keep these houses from being inhabited at all, but if that cannot be done, that they restrict the occupants of these houses to two or sons to each side.

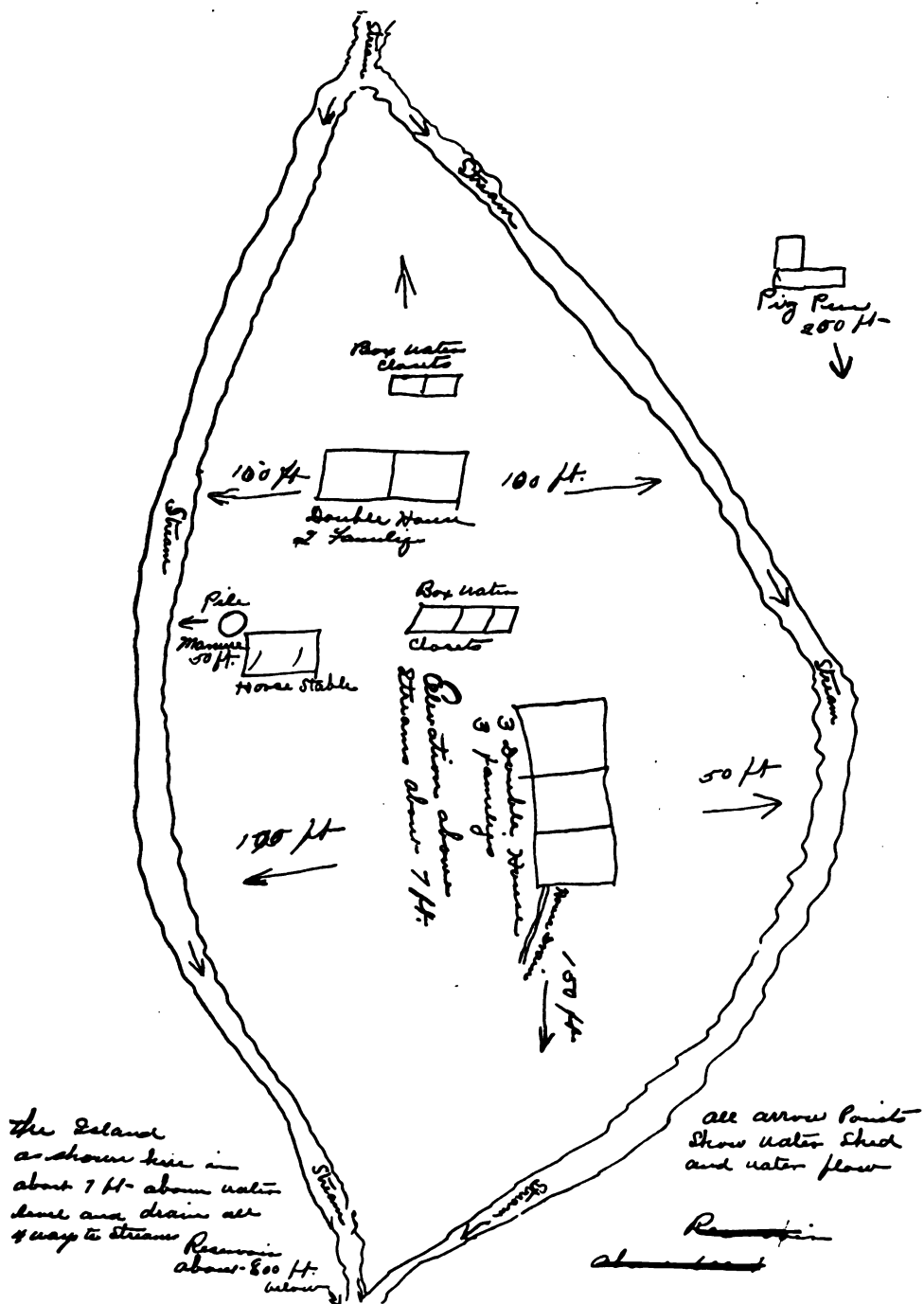


Diagram showing causes of pollution.

Also there should be some steps taken that would give our city full control of the water shed and then it could be controlled with perfect safety. As it is now, if there should be one case of typhoid fever in either of these two houses and the excrement find its way into the stream and into the reservoir, there would probably be an outbreak of typhoid fever such as the city has never seen. The pig pen complained of is fully 200 feet from the stream and kept in a sanitary condition and not under any law governing stable or pig pen along water courses.

Respectfully submitted,

J. S. MILLER,
Health Officer.

LETTER REGARDING WATER RIGHTS OF THE CITY.

Altoona, Pa., July 23, 1903.

Benjamin Lee, M. D., Secretary State Board of Health:

Dear Sir: In reply to yours of July 22d. The city owns the water right, but does not control the water shed. Our reservoirs and streams are five miles from the city line. There is no special act protecting the streams. I suppose it would come under the general laws protecting water courses or streams. If you will send proper orders for abatements we will serve them on the proper parties.

Yours very truly,

SAMUEL B. TREES,
Secretary.

LETTER FROM THE SECRETARY OF THE STATE BOARD OF HEALTH.

July 24, 1903.

Mr. S. B. Trees, Secretary Board of Health, Altoona, Pa.

Dear Sir: Replying to your favor of yesterday, I section twenty-four of the Act of April, 1874, provide
"If any person shall wilfully or maliciously do

done, any act or acts whatever, whereby any building construction, reservoir or works of said company, or any water or gas pipe, * * * or any matter or thing appertaining to the same shall be stopped or obstructed, injured, contaminated or destroyed, the person or persons so offending shall be considered guilty of a misdemeanor, and may therefor be indicted in the court of quarter sessions of the proper county, and on conviction thereof, shall be punished by a fine not exceeding five hundred dollars or be imprisoned not exceeding one year, or both at the discretion of the court."

My recollection of the reservoir at Kittanning Point is that it is so situated that its water might become directly contaminated. If it is so directly contaminated, there is no reason why your own board of the city council, could not proceed against the offenders. Our Board desires to be definitely assured on this point before taking action.

Yours very truly,

BENJAMIN LEE,
Secretary.

CONTAMINATION OF THE WATER SUPPLY OF CARLISLE.

Letter Referring the Matter to the State Board.

Carlisle, Penna., Sept. 3, 1903.

Benjamin Lee, M. D., Secretary of State Board of Health, Philadelphia, Pa.:

Dear Sir: Enclosed I hand you a certificate from J. E. VanCamp, M. D., a member of the Carlisle Board of Health, relative to a case of polluting a small stream of water running into the Conodoguinet creek a short distance above the pumping station of the Carlisle Gas and Water Company on that creek.

The place where the pollution of the water occurs, as well as the pumping station of the company and the stream at that place, is in an adjoining township, and therefore beyond the jurisdiction of the Carlisle Board of Health, as their counsel advises. An indictment for polluting the water is too slow to be promptly effective, and the information furnished me, as contained in Dr. VanCamp's certificate, is now sent to you for summary action by the State Board of Health, as I am advised that your board has power to abate such a nuisance in a summary manner.

The party maintaining the nuisance which pollutes the water is A. S., and he is said to have recently purchased the property where it exists, but no deed to him is shown on the record.

I am informed that he maintained a similar nuisance in the borough of Carlisle some time ago, which was abated by the local board of health.

If you require any supporting affidavits as to the facts they will be obtained and sent to you.

I have prepared a notice to Mr. S. that the nuisance must be abated, and that the matter has been referred to the State Board of Health. I will have this notice served by the sheriff.

Very respectfully,

JOHN HAYS,

President of the Carlisle Gas and Water Company.

Report of Inspection of Conodoguinet Creek.

To John Hays Esq., President Carlisle Gas and Water Company:

This is to certify that on the second day of September, 1903, in company with Capt. J. B. Landis, I made an inspection of a hog pen and yard adjoining, situated in North Middleton township, Cumberland county, Pennsylvania, and located on the north side of a running stream of water, the southern border of said hog pen yard touching the immediate bank of said stream about three hundred yards from where it empties into the Conodoguinet creek, and about two and one-fourth miles above the location of the Carlisle Gas and Water Company pumping station plant.

At the time as above stated there were thirty-six hogs in the hog pen yard and eighteen in the pens—about fifty-four in all.

The yard was in a very filthy condition, emitting a stench that was very offensive and nauseous. The contents of said yard consisted in part of the offal of dead animals—blood, intestines, etc., that were being fed to the hogs; in part, of dead pigs that were lying around, and, in part, of hog excreta all mixed together.

Several small streams of liquid matter leaking from the mass of filth were trickling down the bank and running into said stream of water, contaminating and polluting the water, making it dangerous and unfit for use, and it, in discharging the same into the Conodoguinet creek, contaminates and pollutes the water in said creek causing the water therein to be impure and dangerous.

Respectfully submitted,

J. E. VANCAMP, M. D.,

Member Board of Health.

Letter Reporting Probable Abatement of the Nuisance.

Carlisle, Penna., Sept. 7, 1903.

Benjamin Lee, M. D., Secretary State Board of Health:

My Dear Sir: I beg to acknowledge the receipt this morning of your letter of 4th inst. in reply to my letter of 3d inst., relative to pollution of the Conodoguinet creek water, from which the Carlisle Gas and Water Company takes its supply for the town of Carlisle.

I am advised that the party complained of is removing his establishment in consequence of the attacks made upon him.

If this is so our company will see to having the offal burned and the premises thoroughly disinfected and of course we will not require any further proceedings. If my information is not correct we will ask you to have the necessary inspection made.

The local board of health has had a good deal of trouble with this party and under its force he removed from Carlisle. Apparently he is moving again.

Very truly,

JOHN HAYS,
President Carlisle Gas and Water Company.

**INSANITARY CONDITIONS IN VICINITY OF BRUSH CREEK,
WESTMORELAND COUNTY, OWING TO EXCESSIVE
FLOODS.**

Letters Requesting Aid From State Board.

Greensburg, Pa., Sept. 18, 1903.

Benjamin Lee, Esq., Secretary State Board of Health, Philadelphia, Pa.:

Dear Sir: The citizens of Penn Station and vicinity are badly in need of some assistance from your Board, to remedy the conditions created by the excessive flood in that district in July last. This matter has already been called to the attention of your Board, and I understand that the assistance was refused. The situation is such that I am positive that if your board thoroughly understood it, they would come to the relief of these people. The flood occasioned the landing of a vast amount of refuse and debris in the neighborhood, and this is occasioning disease. Won't you please take this matter

up once again with your Board, and see if they will grant some relief. If you wish to make an investigation, and will advise me, I shall be glad to arrange to meet you or your representative on the ground at any time you may name.

Yours very truly,
CYRUS E. WOODS,

House of Representatives,
Greensburg, Pa., September 21, 1903.

Dr. Benj. Lee, Secretary, State Board of Health and Vital Statistics:

My Dear Sir: I have been asked by several persons residents of Penn Station and in the vicinity of Brush Creek, to speak to you with reference to the appropriation of a sum for dredging the channel, to avoid a pestilence. I have asked them to give explicit data as to what they desire to have done, how to do it, and the cost. Will it be asking too much of you to name a suitable person to view the situation in connection with citizens of Greensburg and the affected district? Whether or not you will feel authorized in recommending a State appropriation, or whether it is a matter which lies solely within the province of the community to correct, we would like your advice as to removing the evil complained of.

Yours very truly,
GEO. F. HUFF.

Senate of Pennsylvania,
Greensburg, Pa., September 25, 1903.

Benjamin Lee, M. D., Secretary State Board of Health:

My Dear Sir: I thank you very much indeed for your favor of the 21st inst., relative to the situation at Penn Station, this county. Will you kindly advise me when the next meeting of the State Board of Health will be held, as Congressman George F. Huff and I would like to appear before the Board to explain the Penn situation to them.

Yours very truly,
CYRUS E. WOODS.

September 28, 1903.

Benjamin Lee, M. D., Secretary State Board of Health:

Dear Sir: Answering your letter of 25th instant, I appreciate very much your kindly interest, and will be very much obliged if you will

advise me when your engineer inspector will visit Penn Borough and the Brush creek vicinity. Some of our citizens with a competent engineer, will meet him immediately upon his arrival, to accompany him upon his tour of investigation. I sincerely hope, for the sake of the community, you will not defer the matter one moment longer than is absolutely necessary.

Very truly yours,

GEO. F. HUFF.

Report of Inspection of Brush Creek by Geo. N. Harlow, Deputy
Engineer Inspector.

Pittsburg, Pa., October 13, 1903.

Benjamin Lee, M. D., Secretary State Board of Health of Pennsylvania:

Dear Sir: In accordance with your instructions of September 24th, to James H. Harlow, and your further directions to me of October 3, I visited Penn Borough, Westmoreland county, "to investigate the sanitary condition caused by interference with the flow of Brush creek, as a result of flood deposits, causing danger of a pestilence in consequence of stagnation of the water and overflow of lowlands, and to report whether a nuisance prejudicial to the public health, and if so what steps are necessary to be taken to abate the same."

Penn borough has a population of about 1,100. The taxable valuation is \$138,000. It is situated on both sides of the Pennsylvania railroad and on the northerly side of Brush creek. The creek itself being nearly all in Hempfield township. It is usually a narrow stream as shown by the three photographs inclosed. When I saw it after two days of rainy weather, all the water passing would flow through a box two feet wide and a foot deep.

On July 5, 1903, there was a remarkable flood here. The water rose so that all the valley up to the level of the Pennsylvania railroad was covered. The track is perhaps sixteen feet above the creek and the valley is about 150 feet wide. The rise was so rapid that there was no time to save property and several lives were lost. In four hours the water had fallen to the confines of the banks again. A deposit of mud was left over all the flooded area. This has been cleared away, Penn Borough spending \$1,500 and the neighboring township of Hempfield \$300 more.

I went over the course of Brush creek accompanied by Ralph

Donaldson, burgess, J. L. Kennedy, attorney for the borough, Geo. L. Witze, of the local board of health, David Rankin, a prominent merchant and J. J. Janeway, a civil engineer.

To my inquiries of the various members I was told that the health of the borough is good. There are at present no small-pox or typhoid cases.

Their complaint is that the water after a severe rain comes down the creek more rapidly than formerly and overflows the banks and runs into the wells of the houses on the low ground. This is partly due to the paving and sewerage of Jeannette, situated on Brush creek one and five-tenths miles above them as given by the mileage of the Pennsylvania railroad. Jeannette's two sewers empty into Brush creek above Penn Borough.

The committee's desire is that Brush creek be straightened, widened and deepened to prevent these overflows.

Adjacent to Penn Brush creek is a sluggish stream with occasional ripples of a few inches fall. The water is contaminated with sewerage from Jeannette and two small private sewers in Penn.

I am of the opinion that the clearing of the bed of the creek will give only temporary relief. That there is no danger of a pestilence due to the flood of July 5, and that such a flood cannot be provided against. The interference of the flow of the stream is due mainly to pre-existing conditions as evidenced by the trees shown in the photographs. That the proper remedy is that the borough of Jeannette be required to purify her sewerage before emptying it into the creek.

Respectfully submitted,
GEORGE R. HARLOW,
Deputy Engineer Inspector.

Report of Inspection of Brush Creek, by John Fulton, C. E.

Johnstown, Pa., Nov. 5, 1903.

Benjamin Lee, M. D., Secretary State Board of Health, Philadelphia, Pa.:

Dear Doctor: In harmony with your instructions of 2d, I have visited and examined the section of Brush creek south of the village of Penn, in Westmoreland county. I was met at Penn station on the Pennsylvania railroad by Mr. James L. Kennedy and others, all accompanying me along the course of Brush creek from the railroad culvert west of Penn to the large culvert east of Jeannette. This is a very sluggish creek, with sections of it on a level.

The first established fact was, that from the prompt action of the local board of health, in removing debris, no disease followed the flood of July 5, 1903.

This reduces the whole matter to damages to creek channel from this great flood.

Section A. B. shows a little stream twenty to twenty-five feet wide, with its marginal banks dotted with a growth of small trees and willows.

The flood has carried a few logs which impede the flow of the water in this creek at a few points. The flood also carried down sand and gravel elevating the bed of the creek in a small way, rendering an overflow to occur more readily than prior to the flood.

The portion of this creek from C. to D., about 2,000 feet is on the land of the Penn Gas Coal Company, with which we have nothing to do, except to require the company to complete the new channel for creek, as they are now filling up the old channel with slate from their mines.

They have begun this work but have paused in its execution.

The whole matter, therefore, rests on cleaning the bed and borders of this creek within the borough bounds of Penn.

This embraces about 1,500 to 2,000 feet of cutting down the small trees along the creek margins; removing logs in bed of stream and removing a few sand and gravel bars to prevent overflows in moderate floods.

I estimate that cutting and burning these will cost \$150.

Removing the gravel bars that endanger the overflow of the creek, \$250; making in all \$400.

The Penn people have spent considerable money in clearing up matters from the flood.

They have no available funds for further work.

The Penn Gas Coal Company should be notified to complete the new channel, as they have now filled up about one-half of the old channel.

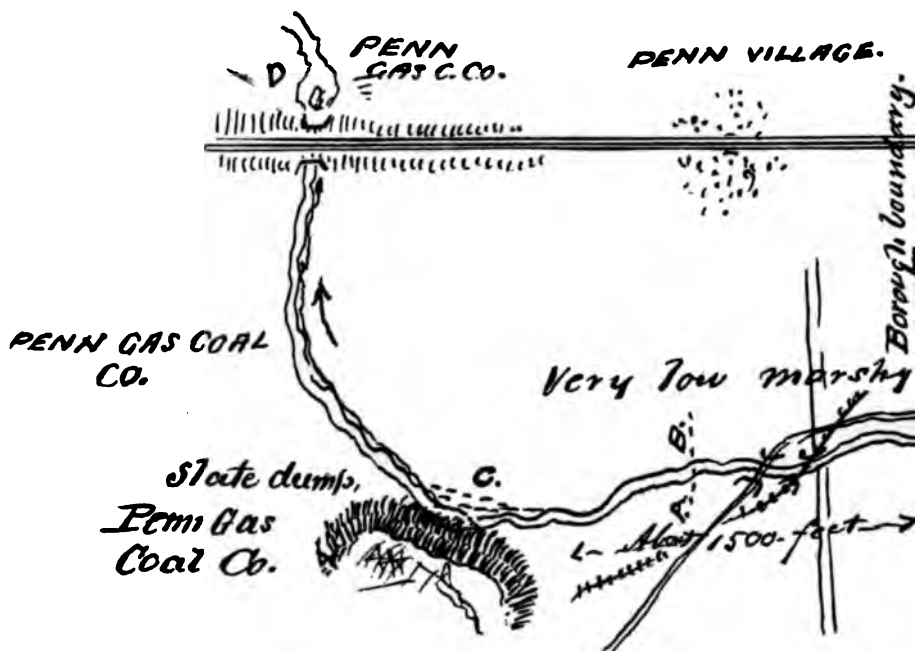
Incidentally, my attention was called to the offensive sewerage coming from the two sewers at Jeannette.

Just now I could not smell any special bad effects, but in very warm weather, it is reported that the creek gives out bad odors.

Very respectfully yours,

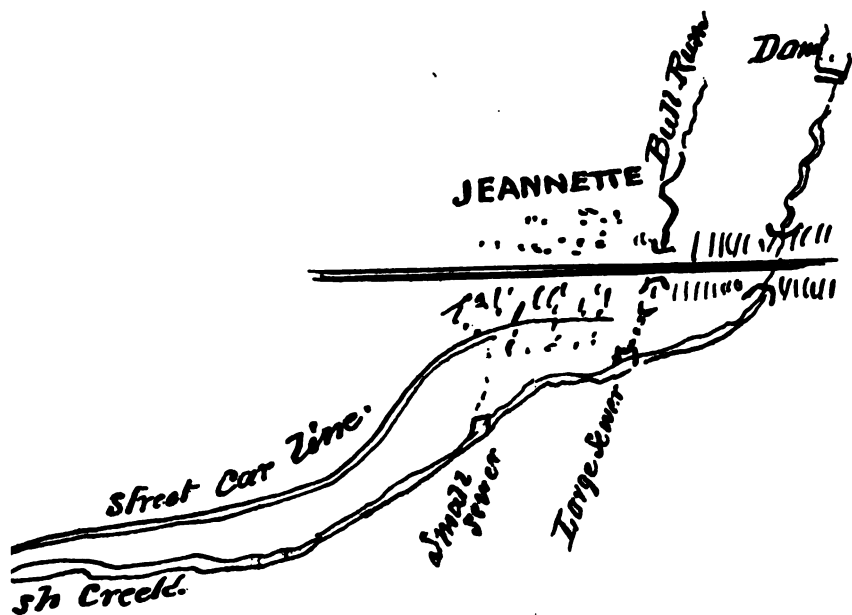
JNO. FULTON,

C. E. Member.

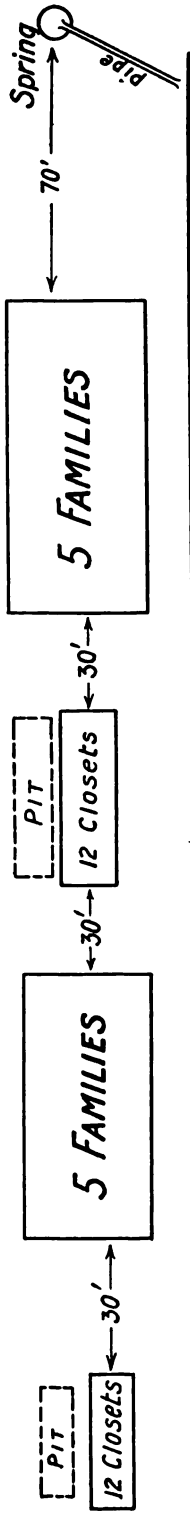


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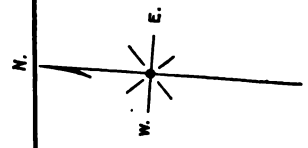
In. Sultan.
C.S.



Sketch showing
BRUSH Creek, and
its relation to PENN VILLAGE.
H



STREET



High Hill

REPORT OF INSANITARY CONDITIONS AT SHEPLER, PA.

Monessen, Pa., Aug. 8, 1903.

Dr. Benj. Lee, Secretary:

Dear Sir: I am directed by the local board of Monessen to report to you the results of my inspection of property at Shepler, Pa., belonging to the Pittsburg Coal Company. This property lies within one-quarter mile of the borough, and consists of tenements occupied by miners and others. During the past four years numerous cases of contagious diseases have broken out there and we have at times established quarantine against the hamlet and set guards. A death just occurred there from diptheria and two cases are being treated there now.

We consider the sanitary condition of the property a menace to the borough and the source of many of our contagious diseases. We ask that the State Board compell the coal company to abate certain nuisances there.

I will enclose a rough sketch showing location of closets which need attention. Two large closets are sub-divided into twenty-four compartments for as many families. Just now the tenements are not fully occupied; about ten families living there now. One closet vault is full up to seat and the pits at the rear also contain large amounts of excreta. These closets are located too close to the houses, vaults not sufficiently enclosed and both of them foul in the extreme. As a health officer I would recommend that these closets be removed to the rear of the property, vaults disinfected or cleaned and then filled up. I also recommend that the tenements be disinfected thoroughly. The source of water for the place is distant from these vaults about 200 feet and appears not to be contaminated. It is a spring at the foot of a high hill and the vaults are at same elevation.

The prevailing westerly wind makes a foul atmosphere for all these people. They have appealed to us for protection and I have thus roughly placed the subject before you. If I can be of assistance in any way I am at your service.

Respectfully yours,

A. L. ARNER,
Secretary and Health Officer.

Recommendations by the Board to the Pittsburg Coal Company.**Aug. 10, 1903.****Pittsburg Coal Company, Shepler, Pa.:**

Gentlemen: I am in receipt of information that the sanitary condition of the properties situated at Shepler and belonging to your company, are in a very bad condition and a source of contagious disease. The recommendation of the State Board of Health are, that the two large closets be removed to the rear of the property, the valuts disinfected or cleaned and then filled up; that the tenement houses be disinfected thoroughly, and that you instruct your tenants to keep their premises in a sanitary condition.

Yours very truly,

BENJAMIN LEE,

Secretary.

APPENDIX E.

REPORTS OF CONFERENCES AND CONVENTIONS.

1. Annual Meeting of the American Devon Cattle Association. Remarks by the Secretary of the State Board of Health.
2. Tenth Annual Meeting of the Associated Health Authorities and Sanitarians of Pennsylvania.
3. Report of the Secretary as Delegate to the Conference of State Boards of Health with the Surgeon General of the Public Health and Marine Hospital Service.

AMERICAN DEVON CATTLE ASSOCIATION.

Remarks Before the Association at its Annual Meeting, held at West Chester, Pennsylvania, January 6, 1902.

By Benjamin Lee, M. D., Secretary State Board of Health of Pennsylvania.

Mr. President, Ladies and Gentlemen: I am here at the request of my, I will not say old, but my esteemed friend, Dr. Morris, to speak a few words on the "Sanitation of Farms and Farm Buildings." I must say that this is somewhat like "carrying coals to New Castle," as Dr. Morris is more capable than myself of giving good advice on this subject. I make this assertion, not as a mere empty compliment, but upon good and sufficient grounds as you shall see. In looking over the Annual Reports of the State Board of Health, I find that in the year 1899, nearly thirteen years ago, this eminently agricultural doctor and bucolic sanitarian, at my request read a paper before the State Sanitary Convention, the title of which was "The Hygiene of Farms and Farm Houses." I do not think I could do you a greater service, or "get it back on him" better, than by reading you his paper in full, as the lessons which it so ably conveys are amply illustrated by insanitary conditions in farms which had fallen under his observation. It is only my knowledge of his excessive modesty, and the fact that he is a bigger man than I, which leads me to refrain.

You, men and women, who are interested in this great industry, of the breeding of dairy cattle and of dairy farming, are concerned with my subject from two entirely different standpoints:

First, the personal.

Second, the public.

First, the personal. It is to be presumed that you value your own lives and those of your families at least as much as other people do. This involves the consideration of the home. It would seem as though I were insulting your intelligence when I say that every precaution should be taken to make the home and its surroundings as healthy in the country as in the town. And yet, falling back upon the old worn out theory, that the country is always healthy, you too often permit yourselves to live in utter neglect of the laws of modern sanitary science. The denizens of cities have in the last

fifty years made immense advances in all that pertains to the hygiene of the home as maintained, not only by the occupant, but by the legally constituted health authorities. It is as true to-day as it was thirteen years ago, and I quote Dr. Morris's words, that "the experience of every country physician will bear us out when we say that such diseases as typhoid fever, diphtheria, scarlet fever and measles have quite as many victims in the country as in the city. There is many a household with a vacant chair by the hearth in every neighborhood in our broad land, which can also testify to this terrible truth." So far as the first of these diseases, typhoid fever, is concerned, he might have said, "more victims" and the same is true to-day of a disease which he failed to mention, small-pox, which is now going up and down through our country districts, not like a roaring lion, but like a sneaking wild cat, seeking whom it may devour, maim or disfigure. At this same convention at which Dr. Morris presented his excellent paper, I had invited a distinguished physician of Philadelphia, also a member of the State Legislature, to read an essay on "Typhoid Fever and its Prevention." He kindly consented, but when he came to the platform, stated, apologetically, that he had changed the title of his paper from that assigned him to "Typhoid Fever, a Disease of the Village and Farm." "The records for our whole country," he maintained, "show a greater proportion of deaths to population from typhoid fever in country places than in cities." The records of this State, so far as the very imperfect means which the Legislature furnishes for compiling them enable us to judge, tell the same sad story, "Suburban and rural districts possess a special liability, which lies chiefly in the contamination of their water supply. These conditions are easily understood, and are usually due to direct communication between cess pools and wells. The fluids percolating the soil from a cess poll near a well, or overflowing in time of rains, carry the disease with ten-fold more certainty than the dreaded sewer of the city. Where shallow wells are used, the water should be tested from time to time, both chemically and bacteriologically, to insure freedom from contamination. And yet, notwithstanding the fact that all this has been the A, B, C, of the sanitarian for twenty years, one can hardly offer the average farmer a greater insult than to cast suspicion on the purity of his well. The family well is regarded with a veneration second only to that accorded the family bible.

When a farmer declares that his great grandfather drank from that well, and that what was good enough for him is good enough for himself, and his children, he does not appreciate that the more ancestral a well is, the greater have been its opportunities for pollution, generation after generation having contributed to the contamination of the soil from when its waters are drawn.

An even more direct means of communication is afforded by those who have introduced a copious supply of water for themselves, have introducing modern plumbing into their houses and use their discarded wells for cess-pools, emptying into them the contents of their water closets and thus contaminating the supply of their less fortunate neighbors. This fact was admirably demonstrated when a man emptied salt water into his abandoned well and his neighbors on lower ground found his well so salty that he could not use it. In all lime stone regions there is sure to be underground communication of quite a direct character, and it is impossible to tell to what distance filth may not be carried. I need not detain you to dwell upon the importance of a dry, well-drained site for a home with a sunny exposure, protection from high winds and remoteness from swamps or stagnant water, of under drainage around your foundation walls, of a dry, well ventilated, if possible, sunshiny cellar, with a good concrete floor, of an abundance of fresh air and sunlight in living and sleeping rooms, with no parlor or spare room which is shut up until everything grows mouldy and each occasional guest goes away with a cold in the head, even if he escapes a fatal pneumonia. All of these things you know already, and to a limited extent act upon. But what you do not know, or if you do know it, fail to admit in a practical way, is that it is just as important that there should be local health authorities in the country as in the city. Every township should have its health officer, as certainly as every borough or city. And this health officer should not be a mere apology for a man, glad to give his services for a paltry fifty cents a week, but a citizen of intelligence and standing who will be able to maintain his own authority and the dignity of the State and possessing some knowledge of sanitary matters. There has been a law on the statute books of this State for several years, authorizing the school directors of each township to appoint such an officer and to assign him an adequate salary. And yet the only circumstance which will induce them to take this most essential step for the protection of the health and lives of their constituents and themselves, is a good sharp epidemic of small-pox. From whom does the opposition come? From the farmers. They say that it will cost money. Yes, that I grant. Does not everything that is worth having cost money? I should not be surprised if, in addition to the somewhat less than one mill which each Pennsylvanian is obliged to contribute every year to the maintenance of the central health authority of the State, he might be compelled to add another mill, even a whole mill for the support of the local health service. But I do assure you it would be money well spent, it would cost less than funerals; far less than the loss of productive lives. I suppose there are farmers in this State, perhaps in this audience, who regard this suggestion with ridicule

and contempt, and who, if an individual wearing a badge of authority should make his appearance on their premises, stating that he had come to examine the well, the cellar, the stables or what not, would either burst out laughing in his face, or in righteous indignation, set the dogs on him.

Why are health officers needed in the country? The reasons are many, but I will present only one as that alone is quite sufficient. I yield to no man in the value which I place on cleanliness. "Cleanliness is next to Godliness," says a misquoted proverb. The proper rendering is "cleanliness" (of person understood) "is next to Godliness" that is, "to beauty." This reading makes sense, the accepted one, nonsense. Cleanliness of person, of habitation, of environment, of food and drink, contribute greatly to the maintenance of vigorous health. But it does not follow that cleanliness is the only sanitary virtue, or that its scrupulous observation in a house will as many suppose and as many persons who possess the "dangerous" acquirement of "a little knowledge" unwisely preach, ward off infection. You may take the cleanest person in the world in the cleanest house in the world, and if the contagium of small-pox, diphtheria, measles, scarlet fever or plague is brought into that house, all his cleanliness will not prevent him from taking the disease and this contagium must have come from a person suffering from the disease. As you value the lives of your little ones, let this truth sink into your minds and govern your conduct. This fact makes the police supervision of all such diseases a matter of absolute necessity in country as well as in city. But no police regulation will enforce itself. There must be an individual in every community who shall be clothed with power and authority to put the law in force, to discover the first cases of epidemic disease, to declare and enforce quarantine, to provide for the necessities of those who are prisoners or even temporary paupers for the public good and to perform the rough scientific disinfection. To impose this duty upon the family physician as is now done, is most unfair, as his relations to the family are such that with the best intentions, he too often fails of his full duty, and so the contagion spreads from family to family, usually through the medium of the school, because parents are unwilling to have their possibly infected children lose a day's schooling. Just so long as sanitary administration is allowed to go at loose ends in the country, just so long will farmers sow abundant crops of little white head-stones in their grave yards, as well as of wheat and corn in their broad fields.

Secondly, to consider for a moments the relation of the cattle breeder and dairyman to the public. Any of you could probably furnish me with figures showing that as a food purveyor, the cattle and dairy interest is far and always ahead of any other. And especially as furnishing the staple food for infancy and childhood, when the

foundations of health and vigor for a life time are being laid, does it possess a transcendent importance. It goes without saying that meat and milk offered for food should be the product of only healthy animals. Tuberculosis, contagious pleuro-pneumonia, anthrax or bloody murrain, milk fever, foot and mouth disease, and in fact any disease accompanied by high temperature or by emaciation, should forbid the use of the animal suffering from the same for food purposes. No cow should be added to a herd until it has been examined by a competent veterinarian. Every herd should be subjected to inspection by a veterinarian at stated intervals. Milk should not be offered for food if it is blue, ropy or bloody, or from a cow within a month of calving or for ten days after calving. The same is true whether the milk is to be used as such or to be converted into butter or cheese. In order that she may give a reasonable quantity of milk of a good quality, the cow must be comfortably housed, well fed and well cared for. As much care should be taken in building the cow stable as in building the home, to have it in all respects adapted to the preservation of her health. Light, ventilation, occasionally even artificial warmth, daily exercise in the open air, absence of dampness, secured if necessary by underdrainage around the walls, are equally important to her as to the human being. House drains should not discharge into barn yards. Hog wallows, duck ponds, all collections of foul or stagnant water should be banished. The water supply should be at least as pure as that which you provide for your family and indeed in many cases purer, if you depend on the ancestral well. The lower animals, as we are fond of calling them, are much more fastidious about the water they drink than we are. The proverb says "you may take a horse to water but you can't make him drink." The observations on which the proverb is based are due to the fact that we so often try to make him drink water which his sensitive nostril warns him it would not be good for him to drink. We do not know that cows have typhoid fever. It has never been proved that they can convey the germ of that disease to their milk after taking it into their stomachs, but it is well known that in order to produce good wholesome milk, they must have plenty of good wholesome water. This is readily understood when we remember that more than 87-100 or nearly 9-10 of milk is water. The floors of the cow stable should be water tight, but board floors are warmer in winter and more comfortable to the feet, than cement or asphalt, at least in the stalls. The floors of the stall should slope slightly outward, and should terminate in an impervious gutter with a sufficient gradient to immediately carry off all fluids. Absolute cleanliness is essential to maintain the health of the herd and to ensure a first class milk. It is doubtful whether manure pits should ever be allowed under a cow stable. If they exist, they should be

kept absolutely free from gasses of decomposition. The mangers should be so constructed that they can be easily cleaned, and should be kept clean, being frequently washed with strong, hot salt water. The frequent use of white wash on the walls and of ground plaster on the floors is imperative. Immovable stanchions are instruments of torture. Cows have a sensitive nervous system and should not be unnecessarily irritated. The man who would kick a cow should himself be kicked out of the community. Every dairy farm and especially every breeding farm, should have a hospital provided with commodious box stalls. Cows about to calve and those giving any evidence of sickness should at once be removed to this building.

Should the disease prove to be of a contagious nature, like pleuropneumonia or foot and mouth disease, the remainder of the herd will thus be protected and the whole stable will not become infected. Immense pecuniary disaster may thus be averted.

Should a stable become infected, the following measures should be adopted. All unused food in mangers or troughs and all litter should be carefully removed and burned. The floors should be swept and scraped. The mangers and troughs should then be thoroughly scrubbed with hot water and whale oil soap. All the other wood work of the stall should, after careful washing, be thoroughly wet with a solution of corrosive sublimate of the strength of a quarter of an ounce to a bucket of hot water.

The floors, after scrubbing, should be wet with a solution of sulphate of iron (green vitriol) of the strength of a pound to a gallon of hot water. When the surfaces have dried, the building should be hermetically sealed by peating up or stuffing all cracks around windows, doors and chimney places, and fumigated preferably with formaldehyde. At the end of twenty-four hours it may be opened, and should be freely ventilated for at least a week before any other animal is placed in it.

The milk house or dairy should not be an annex of the home or of the stable, but an entirely independent building, situated at a considerable distance from both. There should be no sleeping room in it. The floors should be of cement or asphalt with rounded corners. It should be provided with means for heating and ventilation and for the exclusion of flies. It should have an abundant supply of cold and hot water and an ice house or vault. It should never be used for any other purpose. Like the home, it should be located on elevated well drained ground, where it will not be in danger of being flooded in heavy rains. No accumulation of filth of any kind should be allowed in its neighborhood, as milk most readily absorbs foul odors and flavors and is an admirable culture medium for all germs. I need hardly add that no one from an infected house should be allowed to come near it.

One of the European notabilities whoh as recently been visiting this country, in replying to a sentiment at the farewell banquet, said that he supposed that the reason why he had been called upon to speak on that subject was that he knew less about it than any one else. I trust that I shall not leave a similar impression on the minds of this audience.

TENTH ANNUAL MEETING OF THE ASSOCIATED HEALTH
AUTHORITIES AND SANITARIANS OF PENNSYLVANIA,
HELD AT HARRISBURG, MARCH 19th AND 20th, 1903.

Proceedings.

The Tenth Annual Meeting of the Associated Health Authorities and Sanitarians of Pennsylvania was held at Harrisburg, March 19th and 20th, 1903.

The first session convened at 2 o'clock P. M. in the Chestnut Street Market Hall.

A communication was presented from Mr. Crosby Gray, first vice president, announcing with regret his inability to be present at the meeting. Also telegraphic communications from Hon. J. M. Leighner, M. D., second vice president, who had been unavoidably detained at home, and from J. K. Lineaweaver, M. D., who could not attend on account of his illness.

A communication was also presented from William B. Atkinson, M. D., secretary, who had been unavoidably detained at home.

Dr. Benjamin Lee, moved that, inasmuch as all the vice presidents were abesent, Hon. Milton A. Embick, of the State Board of Health, take the chair. The motion was carried, and on taking the chair, Mr. Embick spoke as follows:

Gentlemen of the Convention: I am certainly greatly obliged to you for the honor you have paid me, particularly as I am a late member of the State Board of Health.

I assure you that had it not been for the absence of the first, second and third vice presidents, as announced by Dr. Lee, this would not have happened.

The convention was then opened with prayer by the Rev. William McNally, of Westminster Presbyterian Church of Harrisburg.

The Chairman stated that it was expected to have present His Excellency, the Governor, but as he had found it utterly impossible

to be present, had sent an able representative who would fill his place. Adjutant General Thomas J. Stewart, was then introduced to the Association.

Introductory Remarks.

Adjutant General Thomas J. Stewart:

Mr. Chairman and Gentlemen of the Convention: The presiding officer has stated what I fear will prove an unintentional untruth, and that is, I am fitted to represent the Governor. Unfortunately, I fear I will not be able to do so. I realize that I am in the position of a man in Philadelphia on one occasion who had a number of friends deeply interested in him. He violated a law and was arrested. When he was taken to the prison his friends followed him. He stopped on the steps as he was about to enter the jail and asked the privilege of saying a word to his friends. He said to them: "I thank you very much for being here to-day. I am very glad to welcome you all. I want to say, however, that this place sought me and not I the place." I am in that position to-day, Mr. Chairman.

The Governor will not be here. He is very busy at this time, having his usual duties to perform and in addition to that attending to matters from the legislature which is now in session, engrossing all his time. I am asked to present his excuses to this body and to say for him that he regretted not being here.

I will not attempt, sir, to say anything at length, or in fact, at all, upon the work taken up by the gentlemen who are here and the boards they represent.

I remember a speaker who made use of the term "when wealth was lost, nothing was lost; when health is lost, something is lost; when character is lost, then all is lost." That thought has always been with me. I realize the importance of looking after the health of the counties in the State, and Pennsylvania, sir, is to be congratulated upon the character of men taking up this work. Pennsylvania has yet some rewards to reap from those who have been so actively engaged in the past years in the work of public health, and it seems to me that there ought to be more support, more recognition given to the State Board of Health and to the local boards of health in looking after a great Commonwealth like Pennsylvania. I trust that this meeting will be productive of good. I know it will be characterized by sincerity and faithfulness, and with that, I know that the support of the State will come for the work that is being done. Before long they will recognize and realize the absolute necessity for aid.

I bring to you, gentlemen, as completely as I can, the compliments of the Governor, and wish for the convention great success and most beneficial results for the State at large. (Applause).

Mr. Milton A. Embick, Chairman:

Gentlemen: I took pleasure in introducing General Stewart. I have known him a good many years. He was the happiest man at a camp fire. I know of no one in the board land from the Atlantic to the Pacific who is happier. I did not know, however, that he could be so happy in among small-pox pictures and among these men who are fighting disease and all its terrible effects. We thank him very much.

Dr. Benjamin Lee moved that in the absence of Dr. William B. Atkinson, the Secretary of the Association, Mr. Ed. S. Wagoner, of Mechanicsburg, President of the Board of Health, be requested to act as assistant secretary for the meeting. The motion was seconded by Dr. J. H. McClelland, and carried, whereupon Mr. Wagoner assumed the duties of Assistant Secretary.

Dr. Benjamin Lee: Mr. President, we are honored by the presence of Dr. J. T. Rothrock, Commissioner of Forestry, who has kindly consented to present a paper to the Association. He is very much pressed for time, and I would move that the order of business be suspended in order that we may hear Dr. Rothrock before the regular order of business is entered upon. The motion carried and Dr. J. T. Rothrock presented a paper entitled

MIGHLANDS OF PENNSYLVANIA IN RELATION TO PULMONARY TUBERCULOSIS.

In closing Dr. Rothrock said:

We have now in process of erection a dozen cabins at Mount Alto, ten feet square, whitewashed outside and inside, covered inside with sheathing paper. When they become infected we will tear off the sheathing paper, use disinfectants, whitewash again and cover with a coat of shathing paper. The cabins cost fifty dollars. Here you ask, why not make them of comfortable size? My idea is to drive the patients out of doors into the open air. There is no room for rocking chairs and luxuries inside. My idea is that they shall use these cabins only for retreat from the storms. A camp fire will be put up in the evening for their entertainment indoors. We would use that money in large buildings, but I do not think it would produce the same results. I had them in tents up until last December, and so far as I know they were not injured.

I thank you, gentlemen, for your attention.

Mr. M. A. Embrick, Chairman:

I am glad to know that Dr. Rothrock is to remain in guard of our forests. The thanks of the convention are due him.

Discussion.

Dr. Benj. Lee:

I wish Mr. President, to second your remarks, as to the very great reason for congratulation that Doctor Rothrock still continues Forestry Commissioner of the State. Some of us were exceedingly pained to feel that his services might possibly be lost because they did not receive proper recognition. Fortunately that peril has passed. I would like to call attention to the fact that it happens to be extremely fortunate for our State that the Commissioner of Forestry is also a medical man, a man who has enjoyed the benefits of a medical education. It is a curious fact that in a man who has been educated as a physician, no matter what other profession or occupation he may take up, the instinct of healing will be sure to crop out, and I say it was, therefore, most fortunate for Pennsylvania that the Forestry Commissioner is a man possessing the medical instinct, and that he will be able to utilize these immense reservations of the State for the protection of her water supplies and also for aid in stamping out this terrible disease, tuberculosis or pulmonary consumption. I was greatly interested recently, in looking at the United States census map of the United States drawn with especial reference to the presence of tuberculosis. You may possibly have seen that map, Dr. Rothrock? (Dr. Rothrock replied that he had not.) The interesting feature of it is this: It shows a tract of land in this State running from northeast to southwest, I think, which is perfectly white. All other portions of the map with the exception of a tract in the Adirondacks and certain of the western states, are colored different shades of brown indicating the greater or less presence of tuberculosis. This tract through Pennsylvania is almost absolutely white, showing that we have in this State an ideal location for the care and treatment by open air, of those suffering from pulmonary diseases.

I think that this Association would be doing well before adjoining to adopt a resolution strongly commending the bill which Dr. Rothrock and his friends are urging, to utilize the forest reservations of the State as resorts for those suffering from tuberculosis in the earlier form.

We are fortunate also, in having on the Forestry Commission and the State Board of Health at the same time, Mr. John Fulton, C. E., of Johnstown. His interest in forestry is not less marked than his interest in the health of the State.

Dr. J. H. McClelland:

I was very much interested in Dr. Rothrock's paper. The interest that we have as a State Board of Health and as sanitarians must in-

crease from year to year as we become better informed. I would like to ask Dr. Rothrock under what terms and on what conditions persons are permitted to live in these reservations. Are they bound by any regulations?

Dr. J. T. Rothrock:

Any citizen of the State, so long as he violates none of the laws of the State cannot be excluded from any portion of the reservation. They cannot build houses, cut down trees or living timber, hunt or fish. The whole reservation is for them.

C. W. Youngman, Health Officer, Williamsport:

I would like to say that our town of Williamsport at the board of trade meeting held a few nights ago, endorsed to a man a resolution favoring Dr. Rothrock as Forestry Commissioner. They endorsed the action of Dr. Rothrock in his management of forestry and asked that he be maintained in his position. Five or ten years ago these very men were opposed to anything of this kind. They were opposed to the State appointing these men. They feared that the State was going to rob them of something, deprive them of lands which they could use to their advantage. Through the efforts of Dr. Rothrock, through his lectures in various parts of the State they see in a new light. They take the ground that Dr. Rothrock is right. I am glad to say that there has been a marked change in my community. I would like to ask the amount of lands you spoke of in your paper. Is it land already purchased or simply available or which could be purchased?

Dr. J. T. Rothrock:

Most of the land is already in possession of the State and the title is actually held. There is about one-quarter of it which is in the hands of the title examiner, and on delivery of acceptable title the State will take possession. I believe now that the purchase of land will be suspended for a year. It looks that way now. This does not, however, interfere with the care and management of the land we already have. We can go on establishing reservations and instruction camps.

C. W. Youngman:

I want to second Dr. Lee's motion made a few minutes ago regarding the passing of a resolution urging upon the legislature the necessity of the passage of the bill now being urged by Dr. Rothrock and his friends. I feel that the community of the State is with Dr. Roth-

rock, even in back districts possibly where he has not visited, they speak his name and understand what he is trying to do. There is no question of the great work which he is doing. I do think that if the States in the Mississippi Valley had had Dr. Rothrock in each one of them the last twenty years, that river would not be carrying death and destruction to-day.

Hon. Milton A. Embick, Chairman:

Where the forests of the land have been cut away, every rainfall makes the destruction more complete. I think we owe Dr. Rothrock, whom I have known for ten or eleven years, a debt we can never repay. I want to say for the gentleman of Williamsport, that those who have deforested the land will long to have Dr. Rothrock fill it up again. It is not a question as to the State authorities holding Dr. Rothrock so much as it is a question of Dr. Rothrock being willing to serve the State.

Dr. Benj. Lee:

I have here, Mr. President, a communication from the Secretary of the American Congress on Tuberculosis. It may not be known to all the members of this Association, that such a body exists. The statement which I think Dr. Flick made that the great work of this new century will be the stamping out of tuberculosis I do not believe is exaggerated. Tuberculosis is the only disease so far as I know up to the present time which has the honor of having a Congress, an association, whose work is entirely devoted to its prevention alone. This Congress has at length after two or three years of precarious existence been placed upon a solid basis. It has been reorganized, and its next meeting will be held in St. Louis, Mo., July 18 to 23, inclusive, 1904. This will be at the time you will recognize of the great Exposition. The work of the organization is being prosecuted as rapidly as possible. To facilitate this the Congress has been granted a charter, thus making it a legal body. Among those who have accepted as honorary members of its council are Dr. R. Reilly, Surgeon General of the United States Army, and Dr. P. M. Rixey, Surgeon General of the United States Navy and many prominent representatives of State Boards of Health throughout the United States. I simply desire to call attention to this Congress, and to suggest that if any members present intend visiting St. Louis during the exposition, it would be a matter of great interest to them to participate in this Convention.

Report of the Legislative Committee, Hon. S. T. Davis, M. D., Chairman.

Mr. President and Gentlemen: The Legislative Committee begs leave respectfully to report that a radical change having been made at the last meeting of the Association as regards the constitution of the committee, by which it was greatly enlarged, with the object of having a member to represent each senatorial district, it became the duty of the first vice president of the Association in consultation with the officers of the State Board of Health, to name the members of the Committee. As there are fifty such districts the task was by no means an easy one, and required no little time, and much careful consideration. The aim which that officer had in view, was to secure the services of men of mature judgment, having a good standing in their respective communities, sufficiently patriotic to be willing to render the State service without the expectation of compensation, and possessed of a deep interest in problems of sanitary administration. In many cases the County Medical Inspectors of the State Board of Health had proved themselves to be men of exactly this stamp and were accordingly appointed. It was not always possible in every district of a large city to find men of this character and calibre. In some instances, therefore, more than one member was named having residence in one senatorial district, while other districts were represented by a non-resident. But as the interests of all the sections of a great city are identical in sanitary matters this need not interfere with the harmonious working of the Committee. The object of the Association in requiring a member for each senatorial district, was to bring the factor of personal influence to bear upon every member of the legislature, and in a great city the matter of place of residence plays no part in affording opportunity for personal interview.

The following is a list of the members:

Chairman, Hon. Samuel T. Davis, M. D., Lancaster.

At large, Dr. Benjamin Lee, 1420 Chestnut Street, Philadelphia.

District and Name.	Address.
1. Dr. W. M. L. Coplin,	1629 South Broad, Philadelphia.
2. Dr. Wm. B. Atkinson,	1400 Pine street, Philadelphia.
3. Dr. Lawrence F. Fllick,	736 Pine street, Philadelphia.
4. Dr. Robert L. Pitfield,	5211 Wayne avenue, Philadelphia.
5. Dr. Julius L. Sallinger,	1510 N. Elghth street, Philadelphia.
6. Col. J. Lewis Good,	City Hall, Philadelphia.
7. Hon. Theo. B. Stulb,	506 N. Fourth street, Philadelphia.
8. Dr. Rob. H. Bolling,	117 Bethlehem Pike, Philadelphia.
9. Dr. Rob. S. Maison,	Chester.
10. Dr. Howard Pursell,	Bristol.
11. Dr. Israel Cleaver,	Reading.

District and Name.	Address.
12. Dr. H. H. Whitcomb,	Norristown.
13. Hon. Samuel T. Davis, M. D.,	Lancaster.
14. Dr. T. M. Livingston,	Columbia.
15. Mr. M. G. Stoner,	Harrisburg.
16. Dr. M. F. Cawley,	Allentown.
17. Dr. S. P. Hellman,	Hellmandale.
18. Dr. Henry D. Heller,	Hellertown.
19. Moritz G. Lippert, C. E.,	Phoenixville.
20. Dr. Wm. Allen,	Scranton.
21. Dr. J. S. Hileman,	West Pittston.
22. Dr. Richard Slee,	Swiftwater.
23. Mr. James A. Lindsay,	Bradford.
24. Dr. A. Richter,	Williamsport.
25. Dr. E. H. Ashcraft,	Coudersport.
26. Dr. H. B. Lathrop,	Susquehanna.
27. Dr. Wm. Leiser, Jr.,	Lewisburg.
28. Dr. I. C. Gable,	York.
29. Dr. A. H. Halberstadt,	Pottsville.
30. Dr. S. C. Spalding,	Shenandoah.
31. Dr. A. T. Hamilton,	Lewistown.
32. Dr. Ed. S. Wagoner,	Mechanicsburg.
33. Dr. A. B. Brumbaugh,	Huntingdon.
34. Dr. Spencer M. Free,	DuBois.
35. Dr. W. E. Matthews,	Johnstown.
36. Dr. Frank R. Shoemaker,	Hustontown.
37. James H. St. Clair, V. S.,	Indiana.
38. Hon. J. T. Maffett,	Clarion.
39. Dr. R. B. Hammer,	Greensburg.
40. Dr. T. H. White,	Connellsville.
41. Dr. I. N. McKee,	Kittanning.
42. Maj. J. A. McLaughlin,	Allegheny.
43. Mr. A. J. Pitcairn,	Pittsburg.
44. Mr. A. C. Wallace,	McKeesport.
45. Mr. W. D. Grimes,	Knoxville.
46. Mr. I. N. Wells,	Washington.
47. Mr. H. M. Vance,	New Castle.
49. Dr. J. W. Wright,	Erie.
50. Dr. William Varian,	Titusville.

As soon as all of these appointments were made the appointees were notified of their selection.

The first action of the Chairman was to address a communication to each member of the committee calling his attention to the responsibility resting upon him by reason of his appointment to make it his duty to impress upon his Senator and Representatives in the State Legislature the importance of improved modern, sanitary legislation to the welfare of the State, and urging him, to this end, to secure personal interviews with these officials themselves, and with their intimate friends and advisors, and also to make use of the press in disseminating information to the public on such topics.

The following specific subjects were especially recommended to their careful consideration:

First, the necessity for an increase, and a very generous increase in the appropriation to the State Board of Health, for its routine expenses.

The board is unable to properly discharge the manifold important duties assigned to it by law simply for lack of means. For \$4,000 a year it is expected to supervise the interests of the lives and health of more than 6,000,000 people, scattered over an acre of 45,000 square miles. The committee should ask for at least \$20,000 a year for the general work of the Board and for an increase in the salary of the secretary commensurate with his increased labors and responsibilities.

Secondly, the importance of immediately re-establishing the emergency fund to enable the board to cope with epidemics. The first invasion of small-pox into Pennsylvania, during the present widespread outbreak of that disease, was completely stamped out by the board, because, being able to make use of the emergency fund, it was in a position to immediately post guards over infected houses in the rural districts having no health authorities. Having no such resources since the last legislature cut off the fund, it has been comparatively powerless. The result has been during the past year, 5,867 cases of small-pox, with 446 deaths.

Thirdly, the crying need for legislation to protect our streams from unnecessary pollution. Typhoid fever we have always with us, simply because, horrible to contemplate, so many of us take within us the diluted filth of our fellow human beings. This is simply an intolerable condition, and the people will not be willing to endure it much longer. It is costing the State thousands of lives and hundreds of thousands of dollars every year.

Fourthly, the regulations for plumbing and the registration of plumbers provided by the last legislature for cities of the third class, should be extended to boroughs.

Fifthly, this Association, working as it is, from entirely disinterested motives for the benefit of the people of the whole State is itself entitled to recognition by the legislature. A somewhat similar organization "The Association of the Directors of the Poor and Charity," which meets annually, as does our own Association, will ask for the appropriation of one thousand dollars for each of the years 1903 and 1904, to meet the expenses of stationery, hall rent, printing the proceedings and miscellaneous expenses. The Teachers' Institutes of the State already receive substantial aid from the legislature. The committee should make application for at least an equal sum to that asked for by the Association of the Directors of the Poor, and it would be no more than just that it should be suffi-

cient to cover the traveling expenses of delegates to the annual meeting. Of course, this list by no means exhausts the category of needed laws for the better protection of life and health, but it is as much as, perhaps more than, it will be wise to ask for during the coming session.

The attention of the members of the committee was called to the fact that members of the Legislature naturally cannot devote time and labor to advancing legislation which no considerable number of citizens appear to desire, and that it was therefore necessary for the friends of enlightened sanitary legislation to obtain the co-operation of their sympathizers from every quarter of the State, so that it might be apparent that a large and influential constituency and one which from purely political motives it would be unwise to disregard was in earnest in demanding the adoption of measures for the better protection of the public health. Nothing, it was urged, would take the place of individual effort and personal interviews in impressing upon legislators the importance of placing the chief sanitary authority of the State in a position to discharge its important functions efficiently and promptly.

Whether or not all the members of the committee responded actively to this appeal the chairman is not in a position to state, but he knows that much good work has been done and is still being done by some of them.

In consultation with members of the Legislature who are interested in placing our State on a level with other progressive Commonwealth in matters of public sanitation, it became evident that to prosecute the measures for protecting the water supplies of the State from pollution, after having so often suffered disastrous defeat at the hands of the combined manufacturers of the State, would be not only to again court failure, but might provoke antagonism which would endanger the success of other bills which just at the present time are of greater importance to the protection of the public. Among these were the Emergency Fund Bill. A member of this committee drafted and with the approval of the committee introduced in the House a bill different from the original emergency fund act in the fact that it had reference to small-pox only and was to be operative for only one year. The amount appropriated was \$50,000. In the Senate the bill was amended extending the time for which the appropriation was available to two years. As amended, the bill passed the Senate with but one dissenting voice and the House *nemine contradicente*, thus indicating that the members of the legislature were fully convinced of the necessity for immediate and energetic action to suppress the present serious epidemic. His Excellency, the Governor, however, noted certain objections to matters of detail in the bill and with his permission, it

was recalled to the House for alterations. Members of your committee have been present at Harrisburg at different times while the bill has been pending and were on the floor at the time of its passage in each body, and have also urged its importance on the Chief Executive of the State.

It is not the understanding of the committee that his Excellency views with disfavor the general object and purport of the measure. There is therefore reason to hope that it will become a law at an early date.

The bill just referred to it will be remembered, is simply intended for the suppression of small-pox. Not one penny of this appropriation, should it be granted, can be used to meet outbreaks of any other contagious disease. Hence it is a matter of much importance that the original emergency fund bill designed to enable the State Board to act promptly and efficiently in case of an epidemic of any other disease or of any great calamity threatening the public health, should also be passed. Before another meeting of the Legislature we may have to fight the Bubonic Plague, as they have been doing in California for three years or Asiatic Cholera which has slain its tens of thousands in the Philippines during the same period. The board should at once be placed in a position to meet any such emergency.

The bill giving the State Board of Health a slightly increased appropriation and increasing the salary of its Secretary is now in the House, having been favorably reported by the Committee on Appropriations. Your committee recommends that this effort receive the endorsement and aid of the Association not only as a whole but through the exertions of its individual members.

At a convention called by the Board of Health of the city of Johnstown a few weeks since to take measures for the suppression of small-pox in Cambria and adjoining counties, a committee was appointed to draw up an act amending the act to enable boards of education to act as board of health for their respective townships or districts, and to expend money for sanitary purposes. This bill was drafted, submitted to your committee and approved by it, the understanding being that it would be introduced in the House by the members from Cambria county. This is a measure of great importance, since although the method of assigning this duty to school boards does not commend itself to your committee as the ideal form of sanitary government for townships, yet it is the only one which the legislature has been willing to sanction, and in many instances, during the present and last epidemics, has stood between the people and wide-spread pestilence. The Association should heartily support it. Your committee is unable to state its present position.

The measure recommended in an earlier part of this report having for its object the giving this Association a legal standing by ob-

taining a reasonable appropriation to defray the necessary expenses of delegates in attending meetings, printing, hall rent, and so on, has not as yet been formulated. Your committee suggests that it would be well for a special committee to be appointed to take up this matter during this meeting and report a brief bill for this object.

House bill No. 52 which provides for the disinfection of school buildings at stated intervals is a measure the adoption of which would tend greatly to diminish the prevalence of contagious diseases and should have the hearty support of the Association.

The engineer member of the State Board of Health, Mr. John Fulton, chairman of the Committee on Water Supply, Drainage, Sewerage, Topography and Mines, has suggested the desirability of legislation to establish additional precautions for protection against fire gas in mines, and to create the office of Mine Interpreter, whose duty should be to instruct miners not understanding the English language in the employment of the precautions which the laws require miners to adopt to ensure their own safety and that of their associates in the mines. It is hoped that he will present such a bill to this meeting.

In conclusion your committee earnestly urges every member of this Association to make use of the present occasion to interview the members of the Legislature from his own district and not to discontinue his efforts on returning to his home.

(Signed),

S. T. DAVIS,
Chairman, Member-at-Large.

M. A. Embick, Chairman:

The chairman of the Committee on Legislation has made several recommendations, one of which is in regard to appointing a committee from this body to draw up a bill for presentation to the legislature, having for its object the appropriation of one thousand dollars to pay travelling expenses, etc., of the Association.

Dr. S. P. Heilman:

Is it necessary Mr. President, to have a special committee appointed to draw up this act and report to this convention. If it is, I would move that a committee of three be appointed to take action on the report just presented by the chairman.

The motion was seconded by Dr. J. B. Tweedle, and carried. The chair then asked Dr. Benj. Lee to name a committee of three to act on the Legislative Committee's report.

Dr. Lee then announced the following committee:

Dr. J. H. McClelland, Chairman, Dr. H. H. Whitcomb and Dr. S. T. Davis.

It was ordered that the committee report at the Friday morning session.

Discussion.

Dr. Benj. Lee:

With reference to the different bills to which allusion has been made, I am glad to be able to report to the Association that the emergency fund bill for the suppression of small-pox, passed the House this morning. It will go to the Senate next week, and there is no reason to doubt that it will be promptly passed by that body. The bill as it was reported by the chairman of the Legislative Committee went through both houses with great success. It passed the House, was almost railroaded through, and was sent to the Senate, and slightly amended, went back to the House, was immediately passed and sent to the Governor. His Excellency, however, considered that there were certain points which were objectionable, and the introducer of the bill recalled it to the House, and it has now been amended in accordance with the Governor's suggestions. This being the case, I do not think there is the slightest reason to doubt that he will receive it favorably when it comes back to him again. So we may hope by the end of the next week the bill will become a law and the State Board of Health will be in a position to successfully cope with this wide-spread epidemic of small-pox, as we did when we had the previous emergency fund. The previous epidemic, when the State Board of Health first took hold of it was much more serious than the present epidemic was at its incipency, but there having been no means to combat the latter it has gone on from month to month increasing both in numbers and in virulence until now, as the members will see if they take the trouble to look at the map here displayed, there is not a section of the State but what is more or less infected. The whole State may be said to be saturated with small-pox. If we get our appropriation and go to work, we shall have a task of much greater moment than that which confronted us before.

There was a bill referred to in the report of the Legislative Committee, to amend the township school board of health bill. Is Mr. Fulton able to give us any information as to whether that bill was prepared and presented?

Mr. John Fulton, C. E.:

I think that the bill was prepared and sent to the Legislature.

Dr. S. P. Heilman:

Will Dr. Lee kindly explain the character of that bill?

Dr. Benj. Lee:

Dr. Heilman in common with all the county medical inspectors, has had a great deal of trouble with regard to the present township board of health bill. The present law which authorizes township school boards to enforce sanitary laws is excessively defective. Its great defects are

First, That it is simply permissive. A township school board may organize as a board of health it chooses to. If it does not choose to it need not. Now this proposed bill is to compel every township school board to organize as a board of health.

In the second place, the township school boards fight against accepting this responsibility because they say it is going to cost money and they will have to pay out of the school fund for stamping out contagious diseases. This bill provides for the use of the school funds in stamping out all contagious diseases. I am very glad to learn from Mr. Fulton that it has actually been introduced in the Legislature.

The other bill of which I wish especially to speak is that suggested by Mr. Fulton for insuring greater safety of miners, by adopting proper precautions with regard to "fire damp" and "after damp," as it is called, in the mines. The great majority of our miners do not understand the English language and they are not properly instructed in the precautions which they should take in carrying lights into mines. The consequence is that many accidents occur. Mr. Fulton's suggestion is that there should be created by the Legislature an officer known as Mine Interpreter, who will be able to instruct these foreigners in the proper precautions to be used. I had left this matter in Mr. Fulton's hands to have a bill prepared for the purpose. I should be glad to know whether any such bill has been drawn up.

Mr. John Fulton, C. E.:

There has been no such bill drawn up yet for this reason; our people in the Legislature said that their labor organizations are asking so much of them that it would not be wise to press additional offices for the mines. So we will hold that in abeyance.

Dr. Benj. Lee:

I am glad to know that Mr. Fulton lives up to what I have always laid down as the rule of conduct for health men of all kinds, including sanitarians; that they should be "as wise as serpents and harmless as doves."

Another bill was mentioned in the report which shall extend to borough boards of health the same power over plumbers and plumbing that was extended to boards of health of cities of the third-class by the last legislature. Our board drew up a bill for that purpose, but when members of the Legislative Committee came up to Harrisburg to talk with the Legislature they concluded that they would perhaps better mind their own business and let the boroughs attend to their business. If there are members of boroughs present who would like to take this bill and get somebody to introduce it in the Legislature as being pressed by the boroughs, they are very welcome to make use of the bill, but we feel that the State Board of Health had possibly better not attempt to "bite off more than it can chew."

Ed. S. Wagoner:

I would like to say a few words in reference to this bill, as I can speak from authority and experience, as one who has been in the position that Dr. Davis now occupies, and which I hope he will fill with much better usefulness than I could for several years. If any one thing interests boards of health in Pennsylvania, it is certainly the action of the Legislature which gives to them the power to act and without which they certainly have no power. You must receive that power from the law-making people, the law-giving power, and that is your legislature. There have been quite a number of measures passed in the last seven years to which I referred annually in my report effecting more or less the efficiency of the board of health, and yet I find in my communication with members of the boards in different parts of the State that they are actually ignorant of these laws for the simple reason that the pamphlet laws are not published for universal distribution.

Another thing, with regard to the school act of 1899, empowering school directors to organize as boards of health. It is as Dr. Lee has well said, simply permissive or recommendatory. There is nothing mandatory about the law. We prepared a bill and the law committee presented it to the Legislature of 1901. It was introduced in the House and in the Senate. Also a bill making it mandatory on the part of common council to organize and sustain boards of health. The law of 1893 is likewise only recommendatory or permissive, as you may have it. Now those two acts should be made absolutely mandatory, and why it is that the members of the Legislature cannot rise to an appreciation of a matter of such importance, which affects the health of themselves and their immediate families is something that is positively incomprehensible. I could not offer an excuse if you asked me why it is so.

In order to make the school board law mandatory, compel them to organize or else take away their State appropriation in the event that they fail to organize, you touch an exceedingly tender spot in the rural districts of your State. If you will examine the report of the State Superintendent of Public Instruction, you will find that a large number of the schools of the townships of this State are conducted on from one-half to one mill taxation, whereas in your town you are paying anywhere from three to five mills. The State appropriation for the benefit of the schools was never intended to relieve cities or boroughs or rural districts of taxation. It is simply intended as an aid. We have defective school houses all over our country districts, they are insanitary, the lighting is poor. Any number of children are sent out into the world from our schools afflicted with astigmatism and other eye defects that can be traced to defective school houses, and that is because the schools are run at very little expense. These are matters of prime importance. Last Sunday night, one week ago, I was called up at two o'clock in the morning by a physician from our town who informed me that he had a case of small-pox three and one-half miles from the borough, and wanted to know what to do in the case. I told him positively that I had no jurisdiction in the matter. I took up the matter by long distance telephone with the county medical inspector representing the State Board. He came to me at three o'clock Sunday afternoon. He went to the house and quarantined the family, saw that they were vaccinated and reported the matter to the borough. The poor board then took up the matter on Monday and provided the family with a physician and nurse. On the Saturday prior to the report of this case, when the physician left there, two members of the family left the house, one came to Harrisburg to market on the trolley and the other one went to Fifth Wheel, where they employed one hundred hands, where he went to work. The consequence is we are still in fear of more cases and will be until after the period of incubation has passed, all by reason of two members of that family having mingled with a large number of people. Had there been an organized board of health in the township this would not have happened. We would have had perfect protection because the health officer of the school board could have acted. The minimum of taxation required would be infinitesimal, even though the wages of teachers be raised as contemplated by a bill now in the Legislature. It would not affect them at all except that it might compel them to do what the law originally intended, and that is to pay for their education.

Dr. H. H. Whitcomb, Norristown:

I have been under the impression for the last two years that this law was mandatory. In the winter of 1901 and 1902, when we had

a great deal of small-pox in our county I acted on that belief and compelled a large number of our school boards to take up the work of health boards in their townships, and instructed them as to their duties.

Dr. Benj. Lee:

I trust that Dr. Whitcomb will continue in his blissful ignorance.

Dr. H. H. Whitcomb:

I certainly have been able to prevent the spread of small-pox in some of our townships by that simple ignorance. By staying with them and insisting on their taking up the work at once, which they all did, we speedily arrested the disease and corralled it before it was thoroughly developed, although it seemed that we were going to have it everywhere. In three townships we had ninety-four cases with two deaths, while in our municipal hospital we had 76 cases and 3 deaths. It seems that we had better results in the country than in the hospital.

My idea in reference to this committee is that we should not develop too many bills. I believe we should centre our efforts on one or two or three bills and insist on their passage and make progress slowly. I believe in the past with all respect to Mr. Wagoner's zeal and ability in these matters, that we have always had too many bills and have scattered our ammunition. As a member of this committee I shall use my endeavors in this direction.

Mr. John Fulton, C. E.:

In our county there were two aspects: one was the inefficiency of the school boards and the other was the mill proprietors. When small-pox broke out they took very efficient means of stamping it out simply on a question of loss of output. In Johnstown, we were troubled with men bringing small-pox to the city. Just how to prevent that was a difficult question. We arrested any coming to the city knowing themselves to have small-pox, and at once put them in the hospital. But we found the difficulty in people slipping in in all parts of the town. The first thing we did was to erect a small-pox hospital, a very good one, which cost us about \$15,000.00. We paid our physician \$300.00 per month, more than the Secretary of the State Board of Health receives. We were troubled more with the suburban boroughs and districts who lacked health authorities. We notified every one of them that unless they at once organized we would quarantine against them, and have policemen to keep them out of Johnstown. That brought the question home very thoroughly and boards of health were instituted rapidly. We agreed to take

their patients into our hospital and treat them at actual cost. We had in one village thirteen cases in a week. It is a wonder it did not get all over the village. Another place in Prospect, a lady named Murphy invited all her friends to see her when she had it, as a matter of courtesy. She had them to come and condole with her. So we had that to fight against. It broke out in the outlying towns of Cambria county. We needed protection, so we called a convention a few weeks ago, invited Dr. Lee and all the doctors of Cambria county to come, in order that we might learn something. We had a very good convention. It was one of deep interest. Since that convention, small-pox has almost entirely disappeared, and to-day, we have only five patients in the Municipal Hospital, and they will be discharged in five or six days.

Dr. S. P. Heilman, Heilmandale:

I went to the best lawyer in my town, and asked him what I could do and what I could not do. He advised me to instruct every case of small-pox to be quarantined. I took that ground in my county and had no trouble. In all cases where the families were poor I saw that they were supplied with medical attendance and with the necessities of life at the expense of the township. I said to the school boards, when you come to settle your accounts if they refuse to pay any bills call on me and I will give them my opinion and a piece of law. This always had the desired effect. I believe if the county inspectors will talk kindly to the school boards and show them that we are protecting the public we will have no trouble.

A. C. Wallace, McKeesport:

In McKeesport, we have been very successful in having children vaccinated. Each school is supplied with a register which is subject to the inspection of our board of health. There is one difficulty in our city, and that is regarding physicians who make out certificates of successful vaccination immediately after they perform the operation. In these certificates they state that the child has been successfully vaccinated. According to the law the teacher has to accept that. He or she cannot do otherwise. In one case under our observation, a mother, opposed to vaccination, after her children had been sent home in consequence of not having certificates of successful vaccination sent them to a physician who immediately after applying the virus issued the certificates. The mother had a poultice and applied that to their arms to draw the virus out to prevent them having sore arms.

Dr. J. B. Tweedle, Weatherly:

In our county of Carbon, we have been very free from small-pox

except in the upper end. We had a case break out at Colerain, in Bank township. It was brought from Hazleton, where they had the disease, and among the different kinds of pox brought to our county was this case of small-pox. They sent for the county health officer as they usually do. I responded promptly and found two cases in the family. I called those in authority I could get and found they had no health board in the township. I succeeded after a great deal of difficulty in securing the organization of the school board as a board of health. I think this law should be made mandatory. They should be compelled to serve and I would like to see the bill go through. These two cases were sent to the Hazleton pest house where they accepted them at \$300 each. We thought we had it stamped out, but in about ten days or two weeks after that the disease broke out at Park View where they had three or four cases. I went up there and told the school board they must organize. I gave them all the instructions and authority I could. I was asked to come again on the following day and direct them. I went and secured Health Officer Mumaw to help me. They refused to organize on the ground that the law was not compulsory and they did not care to take the trouble and responsibility. I then went to Hazleton and induced that city to quarantine against the township, and likewise in the surrounding boroughs. The consequence was they were completely shut off. The trains were not allowed to stop and take on passengers. The merchants wanted to deliver goods there, but we threatened to keep their men and teams over there if they went into the quarantined district. We closed them right up in twenty-four hours. The next night I received a telegram asking me to come up and organize the board of health. The board was organized. If the bill in question were made mandatory we would not have this trouble.

J. D. Miller, Health Officer, Altoona:

I think that this Association should make this feature of the township school board law a paramount issue. I had trouble with small-pox in Altoona. The law should be made mandatory not for small-pox alone, but other diseases as well.

About two or three years ago we were visited with an epidemic of small-pox in the outskirts of our city. A total of about ninety-five cases occurred at one time in a population of about one thousand people. The school boards refused to do anything. The consequence was I had to fight.

I can sympathize with our friend Mr. Fulton, from Cambria county, as I had occasion to visit that part of the State. Out near Windber, Somerset county, they had small-pox in a family where I was

asked to disinfect. I was surprised. I saw more small-pox in that township that day, walking around than I ever saw in Altoona. They had not even as much as called a physician. There is but one method of stamping out small-pox, and that is isolation, vaccination and disinfection. There is only one way of stamping out diphtheria and scarlet fever, and that is isolation and disinfection.

Dr. Jesse C. Green, West Chester:

This is a question that interests us. We have in the town of West Chester a township of 750. At the commencement of the school a year ago, in June last, it was supposed that there was a case of small-pox in the building. An expert from Philadelphia, lectured last year at Butler, Dr. William Welch. The doctor was asked to come up and diagnose the case. He said "I do not see small-pox." He further stated "two or three days later will show what it is." The school had a building over the line out of the town, not ten yards from the borough line. We were asked to quarantine the school. We refused because there was no small-pox, as our expert had told us. Some officials of the town thought we should have quarantined the building entirely. In a few days it was found to be small-pox. Then we placed sentinels along the line to keep the people out of town. There was a necessity for the school board to organize as a board of health. They took charge of it and the disease did not extend anywhere else.

Some three months ago a case of small-pox was brought into our town. The case was placed in our hospital. Six weeks ago we heard there was another case of small-pox. The daughter of the patient also took the disease subsequently, and one week subsequent to that another daughter took the same disease. The first case died, followed by the death of the first daughter who took it. The type of disease was termed "Black small-pox."

To come back to the point, it seems to me as if it were advisable to urge with all the force we can the importance of having this township school law made mandatory in order that we who are in the towns and cities will not be subjected to the invasion of small-pox from out-lying districts. I think we should urge it strongly.

John Fulton, C. E.:

There was one thing noticeable in Cambria county, and that was, the persons who were afflicted with small-pox were Americans principally, the people from the old countries having laws which are very rigid, and among them one which requires every one to be vaccinated. We have more trouble in getting Americans vaccinated.

C. W. Youngman:

I rise to a point in reference to physicians signing certificates without waiting until it was determined that the vaccination was successful. We had experience in this line, but we passed a rule not allowing any physician to give a certificate unless the vaccination was successful as determined by a subsequent examination at the end of the eighth day. We had one or two instances where we made physicians pay ten dollars fine for signing certificates in unsuccessful vaccinations.

Rev. J. S. James, Altoona:

It was incidentally disclosed in Altoona that certificates of successful vaccination had been given to pupils who had not been vaccinated at all, whereupon the board of health authorized the two physicians on the board to make personal examinations of all arms of pupils in cination had been given to pupils who had not been vaccinated at all, the board to make personal examinations of all arms of pupils in the city. It was then discovered that about one thousand pupils had never been vaccinated at all. The board immediately adopted a new rule requiring that both teacher and pupil should in all cases be vaccinated in order to be permitted to attend school unless they had previously had small-pox, and we counted three vaccinations successful, and also prescribed that evidence of successful vaccination should be given at the direction of the board. Now if these thousand pupils are not successfully vaccinated they will be immediately forbidden the use of the school. It made a little uproar, but the board proposed to stand by the rules. The board has been advised by the city solicitor that it has authority to do so in all cases where the vaccination is not satisfactory.

A. C. Wallace, McKeesport:

We had ninety-two cases with eleven deaths. Those who died had never been vaccinated. Some claimed vaccination, but all that were examined by the doctor in attendance did not show the evidence of successful vaccination.

Dr. Jesse C. Green:

Two of the three persons who had small-pox, the young women I have already referred to, wanted to see a minister sometime before one of them passed away. We asked one of the ministers of our town who immediately fixed himself up and was allowed to visit the patients. He went in and had them by the hand, prayed with them, come out again, was disinfected, went home and we had him quaran-

tined, which he preferred. He could not go to his church (Methodist) for two weeks, and the school board also notified him to keep his children out of school. No developments occurred as a result of his visit.

Dr. H. H. Whitcomb, Norristown:

I would like to ask Dr. Green why these two women were not vaccinated immediately after the first case instead of allowing the disease to develop and then take them to a hospital. My experience in the last epidemic has been that in all cases where vaccination was immediately performed no other cases developed, and if a case did develop it was simultaneously with vaccination and the patient had varioloid. I myself do not believe in the quarantining of people when small-pox has been in the house if the patient has been removed and vaccination has been properly and successfully performed. I believe there is no necessity for quarantining against small-pox if successful vaccination has been secured. When you quarantine against small-pox you are discrediting your faith in vaccination and are locking up a large number of people in homes where they are kept out of work.

We have an absolute preventive against small-pox in vaccination and I would open the doors of every house after successful vaccination and the removal of the patient.

Dr. Jesse C. Green.

Dr. Taylor gave us the same idea at Butler last year, but there is a feeling of protection, which was the case in our town among the officials who thought that the quarantine of the school should be carried out. It was not a feeling of necessity, we do not want to quarantine, but we thought it better owing to the popular feeling.

J. D. Miller, Altoona:

We have had cases where vaccination would not take even after the third attempt. I find that the public in these cases have a right to certain protection. We have physicians who will give certificates of successful vaccination just to keep on the right side of a family.

Rev. J. S. James, Altoona:

The rule of our board recently adopted regarding vaccination was to the effect that if a vaccination had been performed three times it was counted successful even though it did not produce the typical scar.

Dr. H. H. Whitcomb:

I might add my experience. This fall, a year ago, when small-pox first broke out, I used some of Alexander's virus on myself, fresh

from the farm, without any success. I then tried Mulford's and had no results from that. I then tried the Swiftwater product and that did not give any results. I had a little child that I was attending. I vaccinated myself from the arm of that child with happy results. I have in mind one person who vaccinated one patient seven times without results and the patient finally contracted small-pox.

Dr. T. N. McKee, Kittanning:

I wish to state that in our town of Kittanning, we had during the past year, fifteen cases of small-pox and two deaths. All were natives of the county except two colored persons from the south. In all those cases not a single one had been vaccinated, while others who had been vaccinated did not take the disease although they had been exposed to the infection. This shows the efficacy of vaccination.

I think we should concentrate our efforts on making it obligatory on the part of the township school boards to organize as boards of health. In our district nearly all of them have organized. None of them have refused.

Dr. Benjamin Lee:

Before the session is closed I would like to suggest that the report of the Executive Committee should have been properly placed at this session instead of to-morrow, and I would therefore request that it be heard. I would make a motion that the rule be suspended and the report of the Executive Committee be heard to-day instead of to-morrow.

The motion was carried and the report of the Executive Committee was read by Ed. S. Wagoner, Assistant Secretary.

Report of the Executive Committee.

Mr. President and Gentlemen:

In view of the scanty and diminishing pecuniary resources of the Association, it has been deemed wise by the officers of the Executive Committee to dispense during the past year with formal meetings and to transact the business of the committee by correspondence between the secretary and the members. The last legislative meeting of the Association was held in the month of February. Great exception was taken to this as the weather was extremely cold, and as just at that season many physicians who would be glad to attend were detained at home by the exigencies of practice, however so great was the pressure for the introduction of bills, and so many were the demands upon the time of members of the Legislature at that early period of the session as to make it very difficult for us to obtain a hearing. It was therefore decided to hold this meeting some-

what later so that its influence might be felt in advancing health legislation already introduced. As the report of the Legislative Committee will show there is ample opportunity for such effort at the present time. Of course this will constitute the principal business of this meeting.

There are two other topics which are prominently before the minds of all sanitarians to-day. These are small-pox and tuberculosis. Space has therefore been allotted to them on the program. This continued prevalence of the first named disease in our State justified the devotion of a portion of our time to its consideration although the subject is somewhat trite. The committee has been fortunate in securing presentation of a paper by one of the most energetic of the county medical inspectors of the State Board of Health, and also of an extremely valuable set of wax models exhibiting this disease in all its stages, and of a series of plates having the same object. It is hoped that physicians especially will avail themselves of this opportunity of becoming familiar with the various phases of the disease, as one of the most effective means for spreading the disease has been the failure of the family doctor to recognize it. With regard to the second, tuberculosis, the recent magnificent gift of Mr. Phipps for the establishment of a hospital and laboratory for the study of this disease alone in the city of Philadelphia has interested the entire nation in the problem of the extinction of the great white plague. As is known to most, if not all, of the members this act of munificence has resulted from the life long devoted labors of Dr. Lawrence F. Flick, of Philadelphia, in demonstrating the curability of consumption. The committee feels confident that the members will gladly avail themselves of the opportunity to hear this eminent sanitarian discuss the duties of boards of health in the suppression of this disease in the hall of the House of Representatives on the evening of Thursday, March 19th, the occasion being the annual address before the board. Working along the lines already so well laid down by Dr. Flick, the distinguished Forestry Commissioner of our State, Dr. J. T. Rothrock has achieved admirable results in the establishment of summer camps for consumptives on certain of the forest reservations of the State and will present a valuable paper embodying his experiences. While the program is not a long one therefore, it will be found to be rich in interest and instruction, and the committee trusts that no member will allow himself to miss a single one of the intellectual treats.

Our finances are still the cause of great anxiety to this committee and the officers of the Association. Every method of increasing them that has been suggested has been faithfully tried, and without success. A determined effort should be made at this meeting to induce the Legislature to grant us an appropriation which at least would

enable us to carry on our modest publication without loss to its faithful and self devoted editor.

Respectfully submitted,
BENJAMIN LEE, M. D.,
Chairman.

On motion of Dr. S. P. Heilman, the report was received, and its recommendations adopted.

Dr. Benjamin Lee:

I desire to call attention to the exhibit in the hall, first the map, which shows the distribution of small-pox in the State; second, the plates illustrating small-pox, and third, the very valuable wax models of small-pox of which there is no other such collection in the United States. It has cost thousands of dollars to prepare them, and every physician should certainly study these models with great care.

On motion of Dr. H. H. Whitcomb, the meeting adjourned until 8 o'clock P. M. to meet in the hall of the House of Representatives, on the occasion of the annual address before the State Board of Health, by Dr. Lawrence F. Flick, of Philadelphia.

Thursday Evening Session.

March 19, 1903.

The Association was called to order by Dr. Samuel T. Davis, president of the State Board of Health, who announced that the occasion of the evening was the annual address before the State Board of Health, by Dr. Lawrence F. Flick, of Philadelphia, president of the Free Hospital for Poor Consumptives, and medical director of the Henry Phipps Institute.

ADDRESS.

"The Duty of Boards of Health in the Prevention of Tuberculosis."

By Dr. Lawrence F. Flick, of Philadelphia.

Mr. President, Ladies and Gentlemen:

As your speaker has announced to you, the subject which it is my privilege and honor to talk about to-night is one which is of great interest to us all. It is a paramount subject which has forced itself home to every one of us in one way or another. There is no one here who has not had a practical experience of the importance of the subject. It gives me great pleasure indeed to be allowed to address

the health officers of this Commonwealth upon this subject of the prevention of tuberculosis. The prevention of disease is practically a novelty amongst us. Although government and laws have for their fundamental principles the protection of life, conservation of human happiness, strange to say the prevention of disease has so far been but very poorly treated. This is somewhat difficult to understand. If we study our government and our laws from the beginning we find that every thing that has been enacted into law directly or indirectly had to do with saving of life, protection of the body or conservation of the race. With our present knowledge of disease you would naturally expect that the first thing in law would be protection against disease. As I have said, we find practically nothing in our laws upon the subject except in recent periods. Boards of health only began to spring up in the middle ages. Then certain diseases which have been recognized could not fail to be recognized as civilization increased, to be contagious, were in a measure protected against by quarantine; but the number of diseases which were protected against in this way was quite limited and the protection was of the crudest character. It was only as experience increased and as men were able to formulate plans and methods that protection to the public took any regular form. In Pennsylvania the first effort toward any protection of health was in 1818 when the Philadelphia board of health was established. Since then, cities and towns in various parts of the State have organized health boards. Those of you who have studied the subject will agree with me that even with that which has been done is but a beginning and it is for the health officers of this Commonwealth to incrust upon our laws, upon our form of government, the new knowledge about the prevention of disease which science gives us. And in this regard our customs, our habits and our laws will have to be changed materially, because the new knowledge which comes to us is so very different from the old ideas. The old ideas will not apply to any valuable end. The one thing which has had the greatest influence in this regard is the subject of bacteriology. Bacteriology has given us an insight into a new world within the last few years. The knowledge which comes to us from the laboratory has completely changed our ideas about disease. We no longer look upon it as a result of heredity; we no longer blame our ancestors as of old. The new science of bacteriology has unfolded to us facts which we never dreamed of before; has shown to us that diseases, at least most diseases, are the result of organic life in the form of small organisms called bacteria. These organisms grow and reproduce themselves and propagate themselves in the same way as the grass in the green fields and the animals. This fact has been demonstrated to us, and is just as absolutely true now as the knowledge which we have about the vegetable life

and animal life, and it gives us the key-note to the prevention of disease. We know that inasmuch as these diseases are due to organic life, in order to prevent diseases all that is necessary is to destroy the germs and prevent them from getting into soil in which they propagate, and gradually, by absolutely preventing any further implantation, stamping them from the face of the earth. Thus it is with many diseases. It holds particularly with the disease which I am to speak about to-night; tuberculosis. Of the diseases which have been demonstrated to be due to organic life, none have perhaps attracted more attention than tuberculosis. Tuberculosis has been the greatest plague which has affected the human family. The number of deaths caused annually is so great that we almost hate to think about it. Our country alone has upwards of a hundred thousand deaths, and the deaths represent in a very small degree the sorrow, the affliction and the degeneration which has been brought upon us by this disease. As I have said, bacteriology has given us knowledge particularly about tuberculosis, so that we know just what to do to stamp it out. We have studied the little organism so well that we know its habits of life. We know the soil upon which it grows. We know the conditions under which it can grow. We know the temperature required. We know the thing that interferes with its growth. We know how to destroy its life. We know so much about it that we are in a position to formulate rules under which we can absolutely stamp out the disease. Now it will have to be for boards of health, for gentlemen such as are here to-night, to incrust this new knowledge upon our laws and upon our customs and habits, in order to reap the benefit of what science has taught us. It is for you, gentlemen, to prepare the way, because, in our country, where the making of laws depends upon the people it is not only necessary to educate one or a few men, but we must educate every one in the new methods and laws. It is through our boards of health that this education will largely have to progress. Tuberculosis is a contagious disease, and therein lies our power over it, and right here I want to say something about the distinction between contagious and infectious disease. All diseases which are due to organic life are necessarily communicable diseases. The very fact that they are due to organic life means that they can be communicated to another, but our intimate knowledge of the life-histories of the various organisms which we have learned about and which we now know to produce disease, indicates to us that the method of propagation from one to another differs in different diseases. Some we have learned to look upon as contagious because of the method by which they are propagated from one to another. The distinction is this: A contagious disease is one which is conveyed from one to another by contact direct or indirect. In other words, the person who has the disease must either in his

own person come in contact with another who has not had it, or through some place or thing come in contact with it. The best illustration is small-pox. We have learned that small-pox is always conveyed from one to another either through direct or indirect contact. By indirect contact, we mean the place or thing which has been in contact with the small-pox contagion. An infectious disease, on the other hand, is one in which direct or indirect contact is not necessary. A good illustration of an infectious disease, probably the best, is yellow fever. An old time illustration could be found in malaria. Our forefathers in medicine always spoke of malaria as being infectious. We now understand better why it is infectious. The intermediary agent in yellow fever and in malaria is the mosquito. The mosquito bites a person having the disease at a certain time and then bites another person who is free from the disease, at a certain time, and carries it from one to another. The mosquito may carry the disease miles; hundreds of miles if mosquitoes go that distance. We have certain diseases that are infectious. We must make a distinction between contagious diseases and infectious diseases, which is important, because the preventive measures must necessarily differ. In contagious diseases we have to prevent contact, control contact and sterilization.

Tuberculosis, as I have said, is conveyed directly from one person to another either through the person or through a place or thing occupied by the person. A house, for example, occupied by a tubercular subject for a length of time has power of conveying the disease to a subsequent occupant. Things which have been handled for a long time by a tubercular subject, such as clothing, wearing apparel, furniture, etc., become an indirect medium of contact and have the power of conveying the disease to another. Now in order to prevent the spread of this disease we must inaugurate measures which will either control it directly in such a way as to make the person, place or thing harmless, or we have to prevent contact, or if unable to prevent contact and regulate contact, we will have to sterilize after contact has taken place. We can, therefore, divide the measures for the prevention of tuberculosis into three kinds: the regulation of contact between the sick and the well, the prevention of contact, and sterilization after contact. For the regulation of contact, by education. Tuberculosis is contagious, but is contagious in a different way from small-pox. Small-pox exists all over the body, the breath and the mucous membrane as well as the skin. The small-pox patient almost immediately takes on sufficient intense contamination to make it possible to convey the disease to another person directly. It is practically impossible for a healthy person who has not been protected by vaccination to be in contact with small-pox patients for a

brief period of time without contracting the disease. That is so because the contagion is intense and so rapid that the environment, the surroundings of the patient immediately get the power to convey the disease. The same is true of indirect contact. A place or thing which may come in contact with small-pox almost immediately takes on the capacity to convey the disease to others. Not so with tuberculosis. In tuberculosis we have a single avenue by which the disease is given off in broken down tissue from expectoration or by pus in the form of ulcers. The material which carries this contagion is easily seen, is offensive, disgusting and very apt to be destroyed. Therefore, a tubercular subject has not the power to contaminate his environment quickly with sufficient intensity to give it to others. For the contamination of the place or thing or even contamination of the body of the tubercular subject a long time is necessary; the giving off of a large amount of material is necessary. In fact, in tuberculosis, the early stage, or incipient stage is not communicable and only comes when broken down tissue is given off. Therefore, the contagion cannot be compared with the contagion of small-pox only in so far as both depend on contact, direct or indirect. Because of this condition it is possible with tuberculosis to introduce preventable measures by education which cannot be introduced with the more intensely contagious diseases such as small-pox. We cannot educate people in the way to make small-pox harmless to healthy people. We can educate the tubercular people to make them absolutely harmless to everybody about them. It is possible for us to keep in our homes, in our midst, a tubercular subject without incurring any danger whatsoever. That is because we can control the contagion. By having a tubercular subject conform to measures which will maintain the absolute sterilization of every bit of matter given off we can make him absolutely harmless to his surroundings, and that is possibly not so very difficult to do, if we have a patient sufficiently intelligent and willing to take the instructions under any circumstances and to expectorate nowhere where the sputum cannot be sterilized; one who is willing under all circumstances to spit into a cup which contains a germicide, or when he cannot do this, into a paper napkin and fold it up, to be burned, and under all circumstances to use a paper napkin to wipe his mouth so that he will not contaminate his lips and nose. In this way you can make him harmless to friends. A very good plan in practical life and resorted to among the poor, is to instruct the patient to get a cheap earthenware cup with a handle and put lime water in it, and when the patient is at home, to always use it under all circumstances. The patient should carry with him a cup box and paper napkin cut into squares. When out he can spit into the box use the paper napkins to wipe the mouth and burn the box in the evening. It is a cheap,

easy method for the poor and one which you can instruct them to use, and one which will absolutely make them harmless to others. The difficulty, however, is that, among the poor and ignorant, there is a very large number who will not be educated and who even after they are will not remain so. Those of you who have to deal with this class will appreciate the force of what I have said. The extremely ignorant and poor will only observe law. You must stand over them and force them. When they are out of your supervision, even if educated, they will utterly disregard the rules laid down for them. That is probably because they have not sufficient intelligence to properly appreciate the reason for the rules. Now for this class of patients it is necessary to control by direct regulations or directly by law. By education, by ordinance or by whatever method you may seek to establish, it will fall short. All that can be done with that class of patients is to control contact by taking them out of their homes and putting them into sanatoria or into hospitals. Fortunately, this is comparatively easy. For even this form of prevention or isolation there is no necessity for coercion. With other diseases it does become necessary to resort to coercion, but not with tuberculosis, for this reason: The incipient stage, before reaching the stage of breaking down, is curable. With our present modern methods we can cure every case of incipient tuberculosis. This is not exaggerated. It is based upon experience of years. I have not seen an early case which has not recovered, for some years. When we are able to cure an incipient case, that leads others to seek isolation in sanatoria. The experience at White Haven, which has been in operation the last two years has proven this beyond a doubt, although many of the cases which have been brought there have been further advanced than the incipient stage. Yet there has been restoration of at least seventy-five per cent. of the cases. When I say restoration, I do not mean that we have cured the cases. At least ten years is necessary to do that. I mean restoration to physical form of health, restoration of the weight, of the physical endurance, the absence of cough and fever and the symptoms of tuberculosis. To that extent at White Haven seventy-five per cent. of the cases are recoveries, and in many of the cases, the majority were advanced beyond the stage of incipient tuberculosis. For every case that has gone away from that institution there have been at least half a dozen applications for admission. The result has been that in spite of the rapid growth it has been absolutely impossible to keep pace with the applicants. There are now probably applicants for one hundred, although the beds have been increased to two hundred, and the probability is that if they were increased to five hundred we would have a thousand applicants because of the demonstration made of the curability of the disease. Therefore, for at least this class, for these incipient cases, there is

no need of coercion. They are pleading and begging to be isolated and use every possible influence to be sent to institutions of that kind, and if our Commonwealth to-day could put upon our mountains two thousand beds they would be filled within a month or two. Every incipient case in the State would seek admission, so that all that is necessary for the isolation of these cases is to give opportunity for them to gain admission into sanatoria and the recovery of incipient cases prevents the disease, because an incipient case which gets well never reaches that stage of contagion in which it would be a source of implantation of another case. So much for the isolation and prevention of incipient cases.

As to the advanced cases, experience likewise proves that isolation can be brought about without coercion. The Free Hospital for Poor Consumptives began this week about eight years ago in Philadelphia by quietly gaining admission for dying cases in the wards of hospitals. We were able to make arrangements with a number of hospitals by which they would take dying cases for five dollars per week. The result was that application for admission into these dying wards increased more rapidly than we were able to supply beds for them. There again was demonstrated that all that was necessary even for the hopeless was to give an opportunity for these poor people to find a refuge in some hospital.

On the first of February, the Henry Phipps Institute was opened in Philadelphia. The doors were opened for dispensary patients and registration was begun. Already there have been registered about five hundred patients; five hundred poor, pauperized, dying consumptives, pleading for a place to lie down to die. I am satisfied from experience among the consumptive poor that if this Commonwealth supplied the beds for every poor dying consumptive in the Commonwealth they would be filled as promptly as they could be supplied. No coercion will ever be necessary, because, as I have said, the poverty and distress and the fear of the well people is driving these poor unfortunates to seek admission under any conditions. The accommodations which every hospital has been able to obtain for dying cases have been of the very worst character sometimes, and yet they really accepted with thanks. Crowded as they might be these poor people would still want to crown them more in order to get in.

It remains for the boards of health of this Commonwealth to so instruct the people in this matter as to lesson the suffering upon these poor people on the one side, and to make better provisions for their accommodation on the other. If you could see the dire distress which I am compelled to witness, you would agree that the condition of the consumptive poor has become such that it is a discredit to our Commonwealth. The suffering animals are better provided for. The poor dying victims of this disease are struggling to the very brink of

the grave, under heavy burdens, in trying to make their own living and not a helping hand extended to them. I have seen a poor girl with every organ in her body diseased, with tuberculosis ulcers on her fingers, standing at the wash-tub trying to earn bread to keep her life in her. That is no exaggeration. If such cruelty were practiced on animals our Commonwealth would be up in arms. This position we have driven them to; dying in the gutters. I have taken them from the wharves, from the park, off the streets, and this very day a party came to me and said "I have been notified that my sister must leave her position within six days. Where will I put her?" She was a servant girl, a working girl. She had been warned that she must leave her position in six days. Where is she to go. Within a week I have had a plea from a poor girl who told me that within three days she would be discharged from prison dying with tuberculosis. Where was she to go? Not a hospital door in the Commonwealth is open to her. Now gentlemen, as I have said, we have all been somewhat responsible for creating that position. We have distributed knowledge about the contagion of tuberculosis which has created a natural fear. It is not true knowledge on the subject because it is very greatly over-stated. There is no reason to become inhuman. There is no reason for driving brother and sister from our midst because of tuberculosis and worst of all if we have made no provision for those that we are driving away from our homes.

A third measure for the prevention of tuberculosis is the sterilization after the case in which contact cannot be controlled and regulated. If such sterilization were properly practiced and if our board of health were in more intimate touch with tubercular subjects, the greatest reason for the public fear would be removed. As things are now, people do not understand wherein lies the danger. They do not know how to control the danger. Now if all our boards of health could inaugurate proper measures not only for controlling and regulating contact but sterilization after contact, I believe this unnatural fear would be allayed. If, for example, people knew that the boards of health were watching every case in a community, and were giving proper instruction, proper assistance, and were really demonstrating to the people that the precautions were being practiced, and that where these precautions were not being practiced some control would be taken of the case, and after contamination proper sterilization would be insured all grounds for fear would vanish at once. One of the very first things to accomplish this is the registration of tuberculosis. Every case must be registered. We must first know where every case is before we can attempt to do anything toward proper regulation and sterilization of the environments of cases. A great hue and cry is raised by many well-meaning people who do not understand the sub-

ject of the prevention of diseases which in the past have been based upon such harsh measures that the people at large and many of the medical profession have formed a very wrong idea about what the prevention of disease means. Some years ago I spoke about the registration of tuberculosis before a body of medical men, the greatest lights of the medical profession, and to hear some of the arguments made was most surprising. They feared that the poor consumptive would be shunned by all near and dear to him. By preventing registration and measures which would have followed, they have brought about that very condition which they were trying to put upon registration. Now there is no reason why we should not have registration of tuberculosis. The reasons urged in the past have no foundation in our knowledge, as in times gone by when tuberculosis was looked upon as a visitation of Providence, as legacy from our ancestors. We know now with certainty that tuberculosis is the visitation of our ignorance and not of Providence and that our ancestor has nothing to do with it. In fact, it is quite probable from our best and most recent knowledge on the subject that the offspring of tubercular subjects are less likely to develop the disease than the parents. There is nothing in the history of tuberculosis that needs to prejudice any one. It is no disgrace, no discredit, and there is no longer prejudice in the minds of the public. Therefore, sentimental reasons in the past can have no ground at the present time. Tuberculosis is registered after death. Why not register it before death when good can be accomplished for the poor afflicted mortal and relatives? Why postpone it to a time when nothing can be done? We have no registration in a single city in this Commonwealth. In other States there has been greater progress. There is registration in New York city and in Boston and in some western cities. I hope to see in the very near future, that we will have it in every town, city and borough in the State. We should have it. Every case should be registered. When we have gone this far, then we will be able to properly deal with the entire subject; then the board of health can distribute tracts, circulars or printed matter of whatever form, to give information to every family in which the disease exists, and I think they should go even farther and delegate some person to supervise the preventive measures recommended.

I may again refer to the noble act of Mr. Henry Phipps, in establishing the Phipps Institute, for the study, treatment and prevention of tuberculosis. It was for the very idea of advancing knowledge along these lines that Mr. Phipps gave the money, and the plan which will be followed will be to get in close touch with the consumptive poor, to supply material to treat the disease and supply necessary means of carrying out the work. The plan which has been inaugurated by this institute should be taken up by every board of health

in the Commonwealth. They should get in close touch with these poor people, instruct and show them how to become harmless to others, and when necessary, supply the means to do it. If we had registration, moreover, we could follow up these cases in which the preventive measures are not taken according to our rules, and when removal has taken place either by death or moving to another house, we could sterilize the place and things which have been contaminated by those who have not observed the rules. I cannot tell you how frequently I hear this sad story that a healthy family has moved into a certain house and within six months tuberculosis has developed. No history of exposure in the family or that any person has been anywhere to contract it. It is found that the family which vacated it had a death from tuberculosis just previous. That is a death-trap into which no one should be forced to go, and I am truly convinced from the study of the importance of the subject that at least twenty-five per cent. of new implantations take place in that way. Every house which has been occupied by a tubercular subject and in which proper preventive measures have not been practiced to the satisfaction of the health officer should be thoroughly sterilized, and it should consist of more than merely using sulphur or formalin. Nothing short of thorough and perfect cleansing will properly sterilize a house or the room where the case existed. This was practiced particularly by the Neapolitans over a hundred years ago. Their method was exceedingly harsh and overstepped proper limits. In those days, the moment a tubercular subject was discovered notice had to be given to the proper officer. A notary public went into the house, took an inventory of the effects, confined the patient to a single room, sealed everything in that room and forbid the patient to leave until death occurred. When death occurred, he came again, took an inventory, examined the seals, destroyed all that had been sealed, had the walls scraped, had the wood-work taken down and destroyed. This method as introduced a hundred years ago was absolutely effective. The mortality of the disease then was so enormous as to be a scourge. In fifty years the disease was almost stamped out. As I say, while it was harsh it was nearer the true sterilization than our methods. They maintained absolute cleanliness of apartments. So, when sterilization after tuberculosis cannot be practiced, take the same method as in other diseases and quarantine absolutely. If our boards of health could introduce such methods and absolutely sterilize the quarters of tubercular subjects, it would be a good practice to register every house so sterilized, because by doing that, the man who would seek a new home would have a way of protecting himself by examining the record to see if the house had a clean bill of health. Our boards of health should go even farther. They should not only sterilize the house, but they should sterilize the things used by the

sick. I have seen, for example, a man carry the pack of a letter carrier home. He was substituting and developed tuberculosis, the letter carrier having been laid up with it. Everything that is used or worn by a consumptive acquires in the proper length of time the capacity to develop the disease to the next subsequent person. Unless everything is sterilized there is no protection against this. How often, when a person dies, the relatives give away the clothing and various things used by that person. They are too good to destroy, so they give them to poor people. What a white elephant! With the gift goes death. Again, second-hand goods. How frequently it happens in a family in which death has occurred the room has been cleared out and the effects sent to a second-hand store to be sold. People who buy, buy death with them. There is no way in which that can be prevented except through our boards of health who will step in and see that everything which has been used by the tubercular patient shall be sterilized before transmission to another person.

We have all be accustomed to giving up certain rights and principles in the interest of public good, of sacrifices entailed upon us by reason of practice, made in the interest of the public. Why should we not have these regulations? I fully understand that before such new methods can be inaugurated we have to have the consent of the public. It is for you, gentlemen of the boards of health of this Commonwealth to find the means of educating our people, and when you have educated them to this entire subject they will support you in every possible way, and will be only too glad to make sacrifices necessary. They will be glad to contribute the means required to save lives on the large scale on which it can be done; saved by the prevention of that terrible scourge of humanity. (Applause.)

Dr. Benj. Lee:

I am sure, we have all listened with intense interest and with profit to this very practical and delightful address of Dr. Flick. I desire to move a vote of thanks to the doctor for this interesting and valuable address, and I trust that our guests who are present will feel that equally with the board that they are entitled to a vote on this question.

The motion made by Dr. Lee was seconded by Dr. J H. McClelland and unanimously carried.

The meeting on motion, adjourned until 9.30 A. M. Friday morning.

Friday Morning Session.

March 20, 1903, 9.30.

The Association was called to order at 9.30 Friday morning, March 20, 1903, by Hon. Milton A. Embick, the chairman.

In the absence of the Assistant Secretary, Mr. Ed. S. Wagoner, who had been called home on account of illness in his family, Dr. Robert S. Maison, county medical inspector for Delaware county, Chester; was elected to fill his place.

The chairman stated that the first business before the Association was the adopting of a resolution in favor of Dr. Rothrock's recommendations with reference to the utilization of forest reservations as resorts for those suffering from consumption.

The following resolution then being offered, was unanimously adopted:

Resolved, That this Association heartily endorses the proposed legislation to enable the Forestry Commissioner to utilize the forest reservations of the State as sanatoria for those suffering from the earlier form of tuberculosis, under such regulations as the said Commissioner of Forestry, with the advice of the State Board of Health may adopt.

REPORT OF THE TREASURER.

Dr. Jesse C. Green.

Dr. Jesse C. Green, treasurer of the Associated Health Authorities and Sanitarrians of Pennsylvania, begs leave respectfully to submit the following report for the year ending March 19, 1903:

Receipts.

Balance on general expense of last year,	\$41 66
Balance legislative fund of last year,	20 74
Received from twenty boards of health for 1902,	100 00
Received from two associate members,	2 00
Received from State Quarantine Board, dues to 1903,	14 00
Received from three boards for 1903,	15 00
Received contribution for journal,	1 00
Received for legislative fund,	2 00

\$196 40

Payments.

Hugh Morgan, Butler, janitor,	\$5 00
Blank receipts,	3 50
H. J. Malott, stenographer,	16 50
Postage stamps,	1 00
Wm. B. Atkinson, "public health,"	137 00

163 00

Balance on hand, \$33 40

The report of the treasurer was on motion received and referred to the Executive Committee for audit.

HOUSE QUARANTINE VERSUS EMERGENCY HOSPITALS FOR STAMPING OUT SMALL-POX.

By Robert S. Maison, M. D., Medical Inspector, Delaware County.

Mr. President and Members of the Association:

In compliance with a request to write a paper embodying my experience with the present epidemic of small-pox, it seems to me that a plain narrative of the situation in Delaware county, during the past two years, will furnish matter for discussion by this Association. I trust that some way may be devised whereby our townships will receive proper supervision when afflicted with epidemics. While we have plenty of laws, they do not act effectively, owing to the lack of money to carry them out.

Delaware county, though small, is thickly populated and is practically a suburb of Philadelphia. Five railroads and many trolley lines, connecting the city and boroughs with each other and with Philadelphia, Wilmington and other cities, render communication rapid and constant, and isolation of an infected area practically impossible. In other words, if a township or borough would refuse to take proper measures to control small-pox, the State Board of Health could hardly isolate a community without enormous expense.

When small-pox first appeared in Delaware county in 1899 it was confined to the city of Chester and comprised a few isolated cases. These were removed, by permission of the county commissioners and directors of the poor, to the county farm and placed in an isolated building. A contention immediately arose, the country districts insisting that the city should take care of its own cases and not make them a charge on the county at large. The city replied that she furnished most of the funds for county purposes and being a part of the county was entitled to the same benefits as the county districts. Finally the county commissioners and directors of the poor, finding that the expense was increasing, obtained an opinion from their solicitors that it was not lawful for them to bear the expense of maintaining small-pox cases.

Chester was then asked by its board to build a hospital for contagious diseases, and several times, when more cases would break out, councils would appoint a committee to secure a site and prepare plans and as soon as the number of cases diminished the committee would suspend its efforts and the newspapers and council would

thankfully asert that the disease had been stamped out and that all need of a hospital was past.

The Chester board of health was authorized by the law under which it was instituted, to build and equip a temporary hospital during an epidemic (Act of May 23, 1874). House quarantine was however resorted to and during 1901 was maintained night and day over the infected houses. The city furnished physicians and food and so many thousand dollars were spent that a bitter quarrel arose between the board and the councils. About January, 1902, councils appointed a sub-committee of the finance committee to control all expenditures of the board of health. About March 1, 1902, the number of cases of small-pox diminished so greatly that the sub-committee, in order to save expense, deemed it right to remove the watchman at night. Then the number of cases increased and councils declared that the watchmen could not be made to do their duty and were a useless expense on that account. During that month, at the request of the State Board, I made earnest efforts through the Press and personal interviews to induce councils to build a hospital. I finally went before councils and threatened quarantine by the State unless some immediate action was taken. An ordinance was prepared but failed to pass. Soon afterwards all guards were removed from the infected houses and the epidemic assumed alarming proportions in consequence.

During the winter of 1901-2 cases occurred throughout the county due to infection from Chester and I was kept busy both in helping physicians to diagnose the disease and in treating the cases that occurred outside the city. With one or two exceptions every country physician refused to treat their cases after the nature of the disease was determined, on the ground that their practice would be ruined if their patients heard that they were treating small-pox.

When the city removed the guards the county became more infected and I succeeded in inducing some of the township school boards to organize as boards of health, advising them at the same time to construe the law most liberally as regarded the using of school funds for the suppression of small-pox. This they have done and I am glad to state that the township school boards have shown a determination and energy that puts to shame the weak futile efforts of some cities.

During the winter of 1901-2 all the boards of health in the county held combined meetings and requested the court to request the grand jury to report on the advisability of erecting a county hospital for contagious diseases. In spite of every effort the proposed hospital was not approved of by the political leaders and the judge did not present the petition as requested. Defeated in every attempt to obtain a county or a city hospital we were discouraged and matters

drifted on for several months. Small-pox kept increasing until the city of Chester alone, by the middle of June, seventy cases were under treatment with no quarantine and with an increasing mortality. In fact within a period of ten days in the month of June eleven persons died.

The manufacturing interests now became panic stricken and protested to councils that unless the disease was checked the business of the city would be ruined. The threatened loss of money of course alarmed councils and at once aroused them to action. With no building, and no site on which to build one, the councils seemed to become paralyzed again and not even then would they permit the board of health to act in the matter. There was evidently a likelihood of the hospital project again failing because of the bitter feeling existing not only between councils and the board of health, but also between the members of councils themselves. Besides, even if the projects were carried out, the passing of ordinances, appointing of committees and the satisfying of the majority of the members would have taken from one to two months.

At this juncture I laid the matter before ex-Councilman E. F. White and asked him to join me in offering to councils that we provide a site and build at once a private hospital for small-pox cases—the city to have no responsibility aside from paying for the care of its cases while under treatment. We made the proposal and it was eagerly accepted and a contract was drawn up by the city solicitor providing that we must build and be ready to receive patients within 14 days. Although we did not know when we made the proposal where a site could be secured, we fortunately secured a splendid tract of six acres on the boundary line of the city. Within twelve days from the signing of the contract we erected a building 90x60 feet, plastered and fitted with sanitary plumbing. It contained four wards, office, kitchen, laundry, linen room, two private rooms and two bath rooms. On the afternoon of the twelfth day we held a public inspection and that night we began to haul the cases in our ambulance and by three o'clock the next morning 15 cases were under treatment. During the first seven days 51 cases were admitted. You can readily understand that Mr. White and myself had to work both night and day to accomplish results so quickly, but I doubt if any one can realize the anxiety and the mental strain to which we were subjected not only at that time but continuously ever since.

Our hospital has been open with never less than twenty patients in it since the start. We have treated about 350 cases and with a mortality of ten per cent.

While the contract with the city made the existence of the hospital possible, yet we have received cases from all over the county and

with the removal of the cases the disease has been quickly stamped out. One borough decided last December to save money by employing house quarantine and its two cases have caused nearly twenty more and cases are still in the borough.

It may be that some of you gentlemen may have encountered similar obstacles in your efforts to control the epidemic. If you cannot procure a public hospital, you yet might employ a similar method to that tried by us. I forgot to mention that we secured subscriptions from our business men for \$2,500.00 with the agreement that if we should become financially successful the money would be returned with interest, but if we failed the subscribers could imagine they had purchased gold mine stock.

By our contract we charge a daily rate for each person treated. You would have to settle on a rate that would pay you to run the hospital, a sliding scale of charges being probably the most satisfactory. For example, we charge \$3.00 per day when the number of cases from the city is over ten. When we have ten or less we receive \$4.00 per day.

The cost of constructing a hospital may be most anything that you may choose depending on the size of the building and the choice of materials. The cost of our building was about \$4,000.00 and the equipment \$1,000.00 more. Since then we have made additions costing about \$2,000.00 more, increasing our capacity until we can now accommodate 200 patients. We have heated our buildings with large cast iron stoves, but this method is costly and dirty compared with a steam heating plant which is more cleanly, economical and by introducing fresh air from without over the radiators fully as healthful.

Now you will say, "What are the practical results of the hospital method and in what way is it superior to the house quarantine?" In the first place, house quarantine proved almost useless in Chester from the fact that no watchmen could be secured that were reliable. Frequently inmates slipped out and even friends entered the houses while the watchmen were not looking.

In the second place, the locking up of families with a case causes other inmates to contract the disease. The immediate vaccination of all well inmates not proving effective owing to the small percentage of successful vaccinations. This method is inhuman and too many persons have been forced to contract the disease by boards of health. The law does not allow a small-pox case to be locked in the cell with a condemned murderer, and innocent women and children have too often been murdered by the house quarantine method for any one to justify it from a humanitarian standpoint.

The most important plea in favor of the hospital method is, to my mind, the saving of life through intelligent nursing. Among the

poorer classes the dread of the disease is so great that even the inmates of the same family grossly neglect the patient and I have seen them refuse to enter the bedroom of the sufferer. That a case of confluent small-pox should be allowed to become alive with maggots and die from neglect is not flattering to the community in which it occurs.

On the night our hospital opened I brought in a woman whom the city physician had declared would die and for whom the grave was already dug. This woman recovered, although the physician's prognosis would have undoubtedly proved correct had she stayed home. As I mentioned previously, 11 cases died at home in ten days in the month of June, a rate of 33 per month. In my hospital I have had 36 deaths in eight months. Thirty-three deaths a month would in eight months mean 264 deaths. While no one can say that so many would have died at home, yet I think you will admit that the mortality would have become greater with the house quarantine method. We have found that the sooner a case is removed the less likelihood there is of more cases occurring in the same house. The house is less infected and there is less chance of infection subsequently because of ineffective disinfection. Does disinfection by ignorant employes do any good anyway? I doubt it. No employe of the board of health of the city of Chester has ever been known, until lately, to use any precautions as regards personal disinfection or change of clothing after being in an infected house, and while the board of health of Chester has wished to lock up all our hospital employes and never allow them to leave the premises, it has never, until a few weeks ago, made its own employes observe the slightest precautions. In fact, its physician even now goes into infected houses and coming out mingles with other people without even washing his hands. Until two months ago, at which time two members of the board were forced to resign, it was a common occurrence for our employes when they arrived at a house with the ambulance to find persons walking in and out and no health officer or policeman in sight. From what I have seen of careless methods by health officials it has caused me to come to the conclusion that the spread of small-pox is due chiefly to personal contact and not often caused by infected houses; for if the latter were a prominent cause my city would have been responsible for thousands of cases.

While the first cost of the hospital method is greater, yet in the long run it is far cheaper because it accomplishes the real isolation of the cases and avoids infecting well people. If with this method you enforce compulsory vaccination the small-pox epidemic will soon be a thing of the past.

No one recently successfully vaccinated need fear small-pox. This is the expression used by Dr. Wm. M. Welch, of Philadelphia, and is the verdict that he reaches after many years' experience in treating

this disease. While the subject of vaccination does not come directly within the scope of this paper, yet I feel it to be my duty to add my testimony to its efficacy. Out of 350 cases not one died, to the best of my knowledge, that had ever been vaccinated successfully. I regret that owing to my being overworked it was impossible for me to ascertain the proportion of those vaccinated to those unvaccinated. Those who had ever been vaccinated almost invariably had very mild attacks and those unvaccinated had as a rule very severe attacks. All the cases belonging to the unvaccinated class, if they lived, have assured me that they now believe in vaccination. There are some people who can only be taught by experience, and among these are the anti-vaccinationists and those who refuse vaccination because "if their arms became sore they would lose time and that they cannot afford to waste." In my county, physicians state that a large proportion of vaccinations do not "take" even when the patients have never been vaccinated previously. I believe that this low percentage is due to the increasing purity of the virus used and the care used by the physician when performing the operation. Many persons to-day bear scars due to infection and the resultant abscesses and in whom the vaccination was not successful, and those abscesses are considered proof of successful vaccination and when the person takes small-pox it is claimed that vaccination does not protect. Where boards of health employ physicians to give free vaccination it would be better if the fee were raised and proof of each vaccination being successful insisted on.

Report of the Auditing Committee.

Dr. Benj. Lee, Chairman:

The Executive Committee, acting as an Auditing Committee, begs leave respectfully to report that it has carefully examined the books of the treasurer and finds the report presented to be correct and that there is a balance in the treasury of \$33.40. Of this amount, \$22.47 is chargeable to the legislative fund, and \$10.93 to the general fund.

On motion of Dr. H. H. Whitcomb, the report was accepted and the committee discharged.

Discussion.

Dr. Benj. Lee:

Mr. Chairman, it will be noticed in the report just presented that the balance in the treasury is partly composed of a fund raised in order to advance legislation, and the balance, the smaller part, stands for the regular fund to meet routine expenses of the Association.

Now it is manifest that the treasurer will not be able to pay the bills for the expenses of this meeting out of the amount reserved for routine expenses, and I would inquire whether inasmuch as we can readily see the most important object of this meeting has been the advancement of legislation for the suppression of small-pox, the treasurer would have authority in applying a portion of the legislative fund to meet the expenses of this meeting. In order to bring the matter before the Association, I would move that he be permitted to use the legislative fund in meeting the expenses of this meeting.

The motion was seconded by Dr. T. N. McKee, and carried.

The report of the Special Committee appointed at the Thursday session to consider the report of the Legislative Committee was then offered by Dr. H. H. Whitcomb, in the absence of the Chairman J. H. McClelland, M. D.

The committee, to which was referred the report of the Legislative Committee begs leave respectfully to report:

First, That the passage of the bill increasing the appropriation and the salary of the Secretary of the State Board of Health be urged.

Second, That the emergency fund bill as originally enacted, appropriating fifty thousand (\$50,000) dollars to the uses of the State Board of Health for the suppression of epidemics of contagious diseases or any disasters which may arise, be re-enacted.

Third, That the law authorizing school boards to organize as boards of health be amended so as to make the action mandatory and not simply permissive.

The report of the committee was on motion accepted, and the recommendations therein contained, adopted.

Discussion

of the paper read by Dr. Robert S. Maison was then in order.

Dr. Wilmer R. Batt, Philadelphia:

I think the questions that Dr. Maison has discussed in his paper are very sensible and very important ones. The danger which exists in all communities in the feeble and ineffective attempt to quarantine persons in their own homes is probably responsible to a very large degree for the outbreaks of small-pox in Pennsylvania to-day. It has been my experience that, if for no other reason than the fact that it urges people to take all necessary precautions to prevent contagion of small-pox the compulsory removal of patients to hospitals should be enforced. It may be a little harsh to say so, but the incidents in the present epidemic seems to have been the difficulty of early recognition of the disease on the part of practitioners. Another

reason that it has not compelled health authorities to take as harsh measures as they would is that the disease has not been virulent in character. Patients have been allowed the freedom of their homes not of one room from which all unnecessaries have been removed, but they have been allowed the freedom of the entire house, where every article of furniture, every bit of clothing and other effects have had every opportunity of infection, and this renders difficult the work of disinfection afterwards, for instead of having one room to disinfect, it means that the whole house is to be thoroughly disinfected. It also increases the amount of danger of the contagion to every person in contact. When boards of health shall insist that every case of small-pox be removed to a hospital it is going to be very possible to prevent the disease, because the possibility of being taken to the hospital is a horror the people are not willing to face. I think the experience throughout the State is exactly the same as Dr. Maison has stated in his paper. It has certainly been the experience in large municipalities that any successful attempt to stamp out small-pox must include removal at once to a hospital. It is unfortunate that we do not have compulsory vaccination in the State. Unless we use coercive measures for those outside of the children who attend school it is extremely difficult to get people vaccinated, and it is only unfortunate that some such provision has not been made that we can bring sufficient pressure upon them to voluntarily submit to the operation. There is no more important measure than to immediately issue an order for arrest for every person afflicted with small-pox to be treated in the confines of a municipal hospital.

Dr. T. N. McKee:

I would like to ask if there is any decision on the point of removal of patients to the municipal hospital, where the person is willing to pay for treatment at home in quarantine as the board of health may direct.

Dr. Benj. Lee:

There is a decision in favor of the board of health of Philadelphia sustaining it in the removal of small-pox patients or patients sick with any disease which is contagious, to the Municipal Hospital. That is the only decision with which our board is at present acquainted. If any other of the members happen to know of other decisions we will be greatly indebted for the information, but I think one decision is sufficient.

Dr. T. N. McKee:

Does that cover boroughs?

Dr. Benj. Lee:

No; the decision was given under the act establishing boards of health in cities of the first class.

Rev. J. S. James:

If you will refer to Section 4, Article II, of the act of May 23, 1889, the law is very clear so far as cities of the third class are concerned. We have received in Altoona an opinion from our city solicitor confirming the statements there made. I think the section reads something like this: "That boards of health shall have authority; and it shall be their duty, etc., to arrest, separate and treat persons infected or who have been exposed to infection.

Dr. Benj. Lee:

That section stands exactly as the gentlemen has stated in the law for boroughs.

Simply as an object lesson of the immense superiority of hospital isolation over isolation in homes for checking an epidemic of small-pox, I think this paper we have listened to this morning has an immense value, and we shall, so far as our board is concerned, try to give it a very wide circulation, so that the people throughout the State may appreciate that the immediate removal of a patient to the hospital will cut short an epidemic in half the time that the method of home treatment and home isolation will accomplish.

Personally, I desire to express my admiration of the public spirit shown by the author of this paper in being willing to undertake such an immense risk, since when he was pledging himself to this matter --to erect a hospital within fourteen days which would accommodate a certain number of patients,—he did not know in the uncertainties of epidemics, but what within a month the number of cases in Chester might be rapidly diminished and he might have been suddenly left in the lurch. It is an example certainly worthy of being followed in other portions of the country where local officials are absolutely blind to their duties, as they were in Chester.

J. D. Miller, H. O.:

I would like to add a word in commendation of that paper. I believe it wise on the part of this organization to have the paper printed in the public health reports, and I believe that it would be the consensus of opinion of every one here that if no provision is made for the publishing of the paper in "Public Health" we could get enough money to insure that publication. It should be sent out

to every known board of health in Pennsylvania. It is one of the most interesting papers and one of the most instructive that I ever heard and it has relieved my mind in regard to just some few things I had in doubt in regard to the difference between house quarantine and hospital quarantine. I sympathize with the Doctor in the hard work he had in erecting a hospital. We were just a little more fortunate in starting. I went to the county seat and agitated the erection of a hospital in Blair county for two or three years and failed to get anybody to make a start. Fortunately, last January a year ago, I was drawn on the grand jury. There was the opportunity. I siezed the opportunity and went in to the work. At that time I was alone in Altoona with my work in a population of 50,000. I had to do the work myself and attend grand jury besides. I stayed there, and by the time the grand jury was ready to be discharged I had convinced eighteen of them that it was a necessity to have a contagious disease hospital, and by their recommendation to the court we have now a modern contagious disease hospital in the county, fully equipped and patients in it. We have at the present time only two houses in Altoona in which small-pox is quarantined. We have a fine ambulance which can move anything that is not very sick. We use an old, broken down coach. We can move anything that is able to sit up. We soon expect to have an ambulance of the right kind so that we can move any kind of a contagious disease. We should have legislation compelling people to be removed to isolation hospitals. I believe a city of thirty thousands or upwards should be provided with a hospital of their own in the city limits. We had the same trouble as Chester. The city did not want to do anything because the county gets three-fourths of the taxes.

Dr. Jesse C. Green:

The borough of West Chester wanted to build a hospital for diseases that were communicable, but nobody wanted it. Every party applied to did not want the hospital. The women took the matter in hand. They went around endeavoring to find some place way out of town. Nobody wanted it. I said to the borough fix a place and put up your hospital and do not ask anybody. This was done and our hospital is established and in good condition.

Capt. C. P. Weaver, Norristown:

I only wish to say to those who disbelieve in vaccination that the British army when advancing into territories north of Calcutta into a new district, as soon as they came in power enforced the rules in regard to vaccination. The people were very averse to having their children vaccinated and at first would not submit to it but finally con-

ceeded. They immediately vaccinated the female children, but for males, they would not allow it. Sometime subsequently, there was an outbreak of small-pox in the community. Every female child was immune and not one of them had a case of small-pox. The boys were wiped off with wonderful rapidity. There was hardly an exception to that. The boys were inoculated with small-pox and the death rate was enormous.

Dr. T. N. McKee:

Last December a year ago we had our first case of small-pox, and as it was the first case we have had in the county for seventeen years, everybody was frightened. They did not know what to do and a great many methods were suggested. Finally, by getting the town council, the poor board and health board together and talking over matters we decided to build a municipal hospital on the farm that is controlled by the poor board, situated about two and one-half miles in the country. There was much opposition to it however, and strange to say, all from the medical profession. It was I who made the suggestion and advocated the erection of the hospital and I was jumped on by all of them. The hospital was erected finally and the case removed to it. There have occurred about sixteen cases and there has not been a second case in any house. When a case developed it was immediately removed to the hospital and the other inmates were vaccinated.

Outside of the borough in Jefferson and Ford City they had a total of thirty-six cases, and only one instance in which there was one case in a house. Just the reverse of the condition in our borough. I was very much gratified to hear Dr. Maison's paper because I can go home feeling very much relieved. I do not treat small-pox myself, although I have been sent as the county inspector to visit every case. I think health boards should inspect every case. They do that with us as soon as a contagious disease is reported to the board, the board sends the physician to inspect that case. It shows up this indiscriminate reporting and saves expense.

Rev. J. S. James:

Who pays for the inspections?

Dr. T. N. McKee:

The health board pays me \$10.00 an inspection for each case. I agreed to do it for all diseases no matter what the contagion was.

The report of the Publication Committee was presented by Dr. Robert S. Maison, in the absence of the chairman, Moritz G. Lippert, C. E., of Phoenixville.

The committee reported that the official organ of the Associated Health Authorities and Sanitarians of Pennsylvania had been issued monthly during the year passed, and had been distributed to all bodies and individuals regularly entitled to it, as well as to local boards of health and those interested in sanitary work, who were not subscribers, as an inducement to have them join the Association.

Dr. Benj. Lee:

Mr. Chairman, there was a recommendation in the report of the legislative committee that a committee should be appointed to draw up a law asking for an appropriation from the legislature to this Association to meet its expenses for publication and necessary expenses in connection with the meetings. I would therefore move that a committee of three be appointed to draft a bill for the appropriation of one thousand dollars annually to the Associated Health Authorities of Pennsylvania.

The motion was seconded by Dr. T. N. McKee and carried.

The chairman then named the following committee:

Moritz G. Lippert, C. E., Phoenixville, Chairman.

Dr. Robert S. Maison, Chester.

Benjamin Lee, M. D., Philadelphia.

Discussion.

Dr. Wilmer R. Batt:

I had occasion a few days ago to make a comparison as to the amount of money appropriated, according to the Auditor General's report, to the various State Departments. As an illustration of the profligacy with which they have endowed the State Board of Health, I would mention that the Sanitary Committee for the inspection of live stock receives annually \$44,000.00. The State Board of Health gets \$6,000.00 including salary of Secretary. They spend about \$14,000.00 annually for hatching fish, and about \$6,000.00 for the State Board of Health. Allowing such a condition to exist is a reflection on the intelligence of the legislature. The legislature in 1901 gave over \$14,000.00 to fight forest fires, and not a dollar in the treasury to fight epidemics of contagious diseases. They gave \$1,400.00 to buy disinfectants to fumigate the building on the hill. The State Board of Health could have fumigated much of the State on that basis had they this amount at their disposal.

M. A. Embick, Chairman:

Fallstaff rendered to Prince Hal when he was counting up the large amount of money he spent, an itemized account. As near as

I can remember it started off: so much for sack, which was a drink at that time, and so much for sack, which was for something else, and so much for sack, and finally it got down to a basis of the State Board of Health, one-half penny's worth for bread. That was the bill Fallstaff rendered, and it reminds me a great deal of what the doctor has just said, so much for that and this, and six thousand dollars for the State Board of Health a penny's worth for bread.

Dr. Robert S. Maison:

In looking at this map it has occurred to me, would it not be possible to have it printed, or a diagram made of it showing these centres of small-pox infection. I think it would have a good effect.

Nomination and Election of Officers for the Ensuing Year.

Mr. John Fulton:

The late vice president, Mr. Crosby Gray, of Pittsburg, has retired from the superintendency of the Bureau of Health of that city and is not in active work. He does not feel that he can continue to accept the office of vice president of this Association. I therefore have the pleasure of nominating H. H. Whitcomb, M. D., of Norristown, as vice president of this Association.

Dr. Benjamin Lee:

Of course we all feel most kindly towards Mr. Gray who has presided so long over our deliberations, and I think that were Mr. Gray still in a position to continue that relation with us, Dr. Whitcomb would have been willing to rise and renominate him. Under the circumstances I think it is just to Mr. Gray and just to the Association that we should not press upon him longer the occupancy of the position. I most heartily second the nomination of Dr. Whitcomb.

Dr. Benjamin Lee then nominated Dr. S. P. Heilman, of Heilmansdale, Lebanon county, as second vice president.

The nomination was seconded by Dr. T. N. McKee.

Dr. Lee nominated Dr. T. N. McKee, Kittanning, Armstrong county, as third vice president.

The nomination was seconded by Mr. Fulton.

Dr. Jesse C. Green, of West Chester, the present incumbent, was nominated as treasurer.

The nomination was seconded by Dr. Benj. Lee.

Mr. John Fulton, C. E., nominated William B. Atkinson, of Philadelphia, the present incumbent, as secretary.

The nomination was seconded by Dr. Lee.

The Secretary was instructed to cast a single ballot for each nomination.

They were then declared duly elected for the ensuing year.

The appointment of standing committees being next in order, on motion of Dr. Benj. Lee, it was ordered that the appointment of standing committees be referred to the newly elected first vice president, and that he appoint them at his convenience.

Remarks by the Chairman.

I want to state, gentlemen of the convention, that I have been much gratified in the position you have seen fit to honor me with, giving me the opportunity to look in the faces of men, not great in numbers but great in worth. It is not the numbers that are here so much as it is the millions of people of the great Commonwealth that you represent. There is always a time when some must watch while others sleep or else runs the world away. Some men must come here at great sacrifices to themselves, their friends, their business; and to those who have come here from distant parts of the State, I say, it has been a gratification to have your earnest philanthropic spirit which you have so well manifested. It has been a gratification to me to preside over this meeting. I regard it as one of the proudest epochs in my life.

J. D. Miller, H. O.:

I understand that as Dr. Lee has said, the next place of meeting of this Association will be left in the hands of the Executive Committee. I believe that I voice the sentiments of the Board of Health of Altoona in extending to you an invitation to Altoona as the next place of meeting.

Rev. J. S. James:

On behalf of the board of health, I second that invitation to come to Altoona. We will give you a warm welcome and will guarantee all of the dirt sterilized.

The invitation was, on motion, referred to the Executive Committee.

Adjournment.

The Chairman then announced the meeting adjourned sine die.

REPORT OF THE SECRETARY AS DELEGATE TO THE CONFERENCE OF STATE BOARDS OF HEALTH WITH THE SURGEON GENERAL OF THE PUBLIC HEALTH AND MARINE HOSPITAL SERVICE.

In accordance with a resolution adopted at the regular meeting of the board held November 20, 1902, which instructed the Secretary, on receiving an invitation from the Surgeon General of the Public Health and Marine Hospital Service of the United States to attend a conference with himself and representatives of other State Boards of Health or Quarantine Officers, without awaiting instructions from the board, the Secretary, on June 3, attended the First Annual Conference ever called under the new act of Congress, passed July 1, 1902.

The various States were represented by the following delegates:

California, Dr. M. K. Foster; Connecticut, Dr. J. H. Townsend; Delaware, Dr. E. W. Cooper and Dr. Alexander Lowber; Florida, Dr. J. Y. Porter; Illinois, Dr. J. A. Egan; Iowa, Dr. R. E. Conniff; Kentucky, Dr. William Bailey; Louisiana, Dr. Edmond Souchon; Maine, Dr. A. G. Young; Maryland, Dr. J. S. Fulton; Michigan, Dr. H. B. Baker; Minnesota, Dr. F. F. Westbrook; Mississippi, Dr. J. F. Hunter; Missouri, Dr. A. W. McAlester; Ohio, Dr. C. O. Probst; Oregon, Dr. Andrew C. Smith; Pennsylvania, Dr. Benjamin Lee; Rhode Island, Dr. G. T. Swarts; South Carolina, Dr. T. Grange Simons; Texas, Dr. George R. Tabor; Utah, Dr. T. B. Beatty; West Virginia, Dr. Samuel F. Myers; District of Columbia, Dr. William C. Woodward.

Immediately after the conference had been called to order at 10 o'clock A. M., an address of welcome was made by Assistant Secretary of the Treasury Armstrong. He assured the delegates that everything for their comfort would be done while they remained in Washington, and promised in the name of the United States, to do all possible to further co-operation among the various States in regard to health and sanitary matters.

Surgeon General Wyman then outlined the purposes of the conference. He described the workings of the United States Public Health and Marine Hospital Service, and suggested a plan whereby the work of his bureau and that of the several States might be harmonized, thus increasing the efficiency of each branch. He spoke of the tendency toward co-operation in all branches, and of its special significance and power for good in the line of work being done by the State Boards of Health.

It has been difficult for the National Government, he said, to extend its influence into State health matters without appearing to infringe upon State authority. The Public Health and Marine Hospital Service and the various State health organizations have become so perfected, however, that a sentiment of mutual respect has been established.

He drew attention to the fact that the conference is official in its character, being called by Congress. He outlined the various bureaus of the Public Health and Marine Hospital Service, showing what work is done by each bureau. This, he said will assist in their relations with the service of which he is the head.

General Wyman suggested the appointment of various special committees corresponding with the different bureaus of the Marine Hospital Service. The reports of these committees would be made to the full conference at its annual meetings, he said, and if adopted would have the force which would come naturally by the co-operative action of the National and State authorities.

This plan was adopted by the conference. General Wyman will take the matter up, and it is likely that the committees will be named by him, and that their reports will be made next year.

The discussion of local health and quarantine conditions followed, each representative explaining the sanitary laws and the method of carrying them out in his particular State.

The following is the substance of the statement made by your Secretary on behalf of this board:

The State Board of Health and Vital Statistics of Pennsylvania was established by act of Assembly, June 3, 1885. The Board consists of six members, a majority of whom must be physicians of not less than ten years standing in medical practice, and one of whom must be a civil engineer. The remaining member may be of any calling or profession. Our aim, is, if possible, to have a business man on the board. The board elects a Secretary who must be also a physician of not less than ten years standing. The Secretary has a vote, except upon matters pertaining to his own office. There is, therefore, virtually, a board consisting of seven members of whom five are physicians. The board has executive authority in all places having no sanitary authorities of their own or in which the sanitary laws are inoperative. As the board appears to be the only body which can determine whether or not the sanitary laws are inoperative in any special locality, the State Board takes it upon itself to determine this question and has therefore tolerably general jurisdiction, over the entire State. Of course, it is careful not to interfere unnecessarily with the action of local boards in cities of considerable size.

When the board was first established, there were but fifteen local

Court, which reversed the judgment of the first court. The State Board of Health appealed to the Supreme Court and was there again turned down. The Board has, therefore, been left in a discredited position and should the investigation of the United States Public Health Service result in re-opening the case, we shall feel that we have been assisted to a material degree.

The conference adopted the following resolution:

Whereas, The Conference of the State Boards of Health of the United States with the Public Health and Marine Hospital Service, having confidence in the earnest efforts and ability of the governor and State Board of Health of the State of California, acting in harmony with the Bureau of Public Health and Marine Hospital Service to thoroughly eradicate Bubonic plague heretofore existing in the city of San Francisco, do resolve that, in the judgment of this Conference, so long as the present effective work is continued, there is no need for quarantine restrictions of travel or traffic to or from that State.

Resolved, That the methods of co-operation between national and State health authorities suggested by the presiding officer meet the approval of the Conference.

The announcement of the death of Dr. Gardner, who represented the State of California at the special conference called last winter with reference to the presence of Bubonic plague in California, was received with expressions of the deepest regret on the part of those who had had the privilege of meeting Dr. Gardner on that occasion, and a resolution expressive of the regret of the Conference and of sympathy with Dr. Gardner's family was adopted. A resolution was also adopted by request of Dr. Porter, the representative of Florida, requesting the legislature of that state to adopt a law now pending, providing for the registration of vital statistics. It was the universal sentiment of those participating in the Conference that the decided step in advance had been taken towards establishing the National and State Health Authorities upon a common basis of harmony, co-operation and solidarity.

Respectfully submitted,

BENJAMIN LEE,
Secretary.

APPENDIX F.

COMPLAINTS ATTENDED TO BY CORRESPONDENCE.

1. Drainage, Albion, Erie county.
2. Unsanitary conditions, Alum Bank, Bedford county.
3. Polluted water supply, Altoona, Blair county.
4. Tallow works, Allentown, Lehigh county.
5. Pork packing establishment, Allegheny, Allegheny county.
6. Offensive stables, Bridgeport, Fayette county.
7. Insanitary school building, Bernice, Sullivan county.
8. Slaughter house, Bangor, Northampton county.
9. Insanitary conditions, Bolivar, Westmoreland county.
10. Offensive dam, Boiling Springs, Cumberland county.
11. Garbage deposits, Braddock, Allegheny county.
12. Deposits of night soil, Chester, Delaware county.
13. Pollution of a stream, Carlisle, Cumberland county.
14. Tallow works, Carlisle, Cumberland county.
15. Deposits of garbage, Charleroi, Washington county.
16. Offal from butcher shop, Cain, Chester county.
17. Filthy closets, Duquesne, Allegheny county.
18. Polluted stream, Darby, Delaware county.
19. Slaughter house, Derry township, Mifflin county.
20. Slaughter house, Danville, Montour county.
21. Slaughter house, DuBois, Clearfield county.
22. Piggery, East Landsdowne, Delaware county.
23. Drainage, East Landsdowne, Delaware county.
24. Drainage, Everett, Bedford county.
25. Piggery, Emlenton, Venango county.
26. Piggery, Eagleville, York county.
27. Insanitary conditions, Edgeworth, Allegheny county.
28. Polluted creek, Gilberton, Schuylkill county.
29. Drainage, Greensburg, Westmoreland county.
30. Polluted water supply, Galetton, Potter county.
31. Polluted water supply, Guilford township, Franklin county.
32. Insanitary conditions, Glen Campbell, Indiana county.
33. Polluted water supply, Holmesburg, Philadelphia county.
34. Piggery, Hanover township, Luzerne county.
35. Dead animals, Hanover, York county.
36. Overflowing closet, Hellertown, Northampton county.

37. Stagnant water, Kelayres, Schuylkill county.
38. Slaughter house, Kulpville, Montgomery county.
39. Polluted ice supply, Ludlow, McKean county.
40. Night soil, Lower Makefield township, Bucks county.
41. Drainage into closets, Loganton, Clinton county.
42. Drainage, Lykens, Dauphin county.
43. Drainage, Lehighton, Carbon county.
44. Deposits of garbage, Lancaster township, Lancaster county.
45. Drainage, McKeesport, Allegheny county.
46. Dog pound, Manoa, Delaware county.
47. Dumping ground, Meadville, Crawford county.
48. Drainage, Mifflintown, Juniata county.
49. Oil works, Marcus Hook, Delaware county.
50. Dumping grounds, McKees Rocks, Allegheny county.
51. Abandoned canal, Millersburg, Dauphin county.
52. Polluted stream, Morrell, Huntingdon county.
53. Filthy premises, Monessen, Beaver county.
54. Improper burial, Markle, Westmoreland county.
55. Cesspool, Milton, Northumberland county.
56. Abandoned wells, New Bloomfield, Perry county.
57. Drainage, New Florence, Westmoreland county.
58. Night soil, Newport, Perry county.
59. Cesspools, Penn township, Westmoreland county.
60. Piggery, Pen Argyl, Northampton county.
61. Filthy closets, Pine Grove, Schuylkill county.
62. Insanitary conditions, Phillipsburg, Centre county.
63. Garbage, Stowe township, Allegheny county.
64. Stagnant pond, Scranton, Lackawanna county.
65. Garbage, South Bethlehem, Northampton county.
66. Polluted stream, Sharon Hill, Delaware county.
67. Insanitary conditions, Shippensburg, Cumberland county.
68. Insanitary conditions, Trainer, Delaware county.
69. Piggery, Troop, Montgomery county.
70. Piggery, Troy, Bradford county.
71. Filthy alley, Uniontown, Fayette county.
72. Closets, Unity township, Westmoreland county.
73. Overflowing cesspools, Wall, Allegheny county.
74. Filthy property, Wall, Allegheny county.
75. Overflowing vault, Wyndmoor, Montgomery county.
76. Insanitary street, West Berwick, Columbia county.

APPENDIX G.

ANNUAL REPORTS OF CITIES AND BOROUGHES.

Abington,	DuBois,
Aldan,	Duncannon,
Allentown,	Dunmore,
Alliance,	Eaglesmere,
Altoona,	East Bangor,
Archbald,	East Berlin,
Arnold,	East Brady,
Ashley,	Ebensburg,
Atglen,	Eddystone,
Avalon,	Edenburg,
Avondale,	Edgewood,
Bath,	Elliott,
Bellevue,	Elizabethtown,
Ben Avon,	Emaus,
Bendersville,	Emlenton,
Birdsboro,	Emsworth,
Blakely,	Ephrata,
Blairsville,	Erie,
Bridgeport,	Factoryville,
Bridgeport School District,	Farmington,
Bristol,	Fleetwood,
Brookville,	Forest City,
Butler,	Fountain Hill,
Canton,	Frackville,
Carbondale,	Freeport,
Carlisle,	Gettysburg,
Carrolltown,	Greensburg,
Catawissa,	Greenwood,
Clarion,	Hallstead,
Coatesville,	Hatboro,
Coudersport,	Honey Brook,
Crafton,	Indiana,
Cresson,	Jamestown,
Dallastown,	Jeddo,
Danville,	Johnsonburg,
Dayton,	Johnstown,
Downingtown,	Kane,
Doylestown,	Kennett Square.

Kington,	Port Allegheny,
Kinzua,	Port Carbon,
Kipple,	Pottsville,
Kittanning,	Punxsutawney,
Knoxville,	Reading,
Lancaster,	Renovo,
Lancaster township,	Reynoldsville,
Landingville,	Ridgway,
Lanesboro,	Rochester,
Lansdowne,	Rockledge,
Lansford,	Rockwood,
Lewistown,	Scott,
Lower Providence,	Scottdale,
Ludwick,	Selinsgrove,
Mahoning,	Sewickley,
Manheim,	Sharpsburg,
Mayfield,	Sharpsville,
McKeesport,	Sheraden,
McSherrystown,	Shippenville,
Meadville,	Slatington,
Mechanicsburg,	Smithfield,
Media,	Spring Grove,
Mifflinburg,	St. Clair,
Millesburg,	Steelton,
Millford,	Susquehanna,
Millersburg,	Swarthmore,
Millvale,	Taylor,
Milton,	Telford,
Minersville,	Third Gap,
Monessen,	Titusville,
Montgomery,	Tyrone,
Montoursville,	Upper Providence,
Morton,	Verona,
Mt. Carmel,	Versailles,
Mt. Jewett,	Warren,
New Albany,	Washington,
New Brighton,	Watsontown,
New Castle,	Wayne,
Newtown,	Weatherly,
Norristown,	Wells,
North Clarendon,	Wellsboro,
Northumberland,	Wells township,
Oakdale,	West Bethlehem,
Oakland,	West Bridgewater,
Oakmont,	West Chester,
Oil City,	West Easton,
Orwigsburg,	Westfield,
Palo Alto,	West Hazleton,
Parkersburg,	West Pittston,
Patton,	Williamsport,
Philadelphia,	Wysox,
Pine Grove,	Yeadon,
Pittsburgh,	York.

Tabular Abstract of Annual Reports of Boards of Health of Cities and Boroughs made to the State Board of Health for the year ending December 31, 1902.

Name of City or Borough.	Population.	Deaths.	Births.	Death rate per 1,000 persons living.	Diphtheria and Croup.		Scarlet Fever.		Typhoid Fever.		Small-Pox.		Consumption.		Measles.		Nuisance.	
					Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Reported.	Abated.
Abington,	4,200	4	6	4	10	1	3	3	.....	.....	1	1	.....	.....	.....	.....	2	2
Aldan,	1,000	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5
Allentown,	38,000	712	894	17.4	62	17	67	10	619	75	6	1	.....	59	131	1	1,317	1,310
Alliance,	6,000	31	71	5.1	11	1	6	1	8	2	.....	.....	1	1	1	1	4	3
Altoona,	55,000	716	1,106	13	70	14	90	6	131	20	63	6	.....	41	.....	.....	1,098	1,098
Archbald,	6,000	74	115	12.3	3	1	13	1	.....	.....	7	.....	.....	.....	.....	.....	2	2
Arnold,	2,000	20	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	4
Ashley,	5,000	54	.....	10.5	15	.....	44	2	4	1	.....	.....	7	7	.....	.....	60	59
Atglen,	500	5	6	10	.....	.....	1	.....	2	.....	.....	.....	.....	.....	20	.....	6	6
Avalon,	4,125	64	.....	8.9	4	1	14	.....	13	.....	1	.....	8	3	73	.....	82	82
Avondale,	700	12	12	11.4	.....	.....	.....	.....	12	2	.....	.....	.....	.....	.....	.....	5	5
Bath,	750	8	10	10.6	.....	.....	6	.....	.....	.....	.....	.....	1	1	.....	.....	2	2
Bellevue,	4,300	63	63	8.3	2	.....	.....	.....	10	1	3	.....	.....	3	47	2	37	37
Ben Avon,	800	10	16	20	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	15
Bendersville,	385	8	3	8.3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	17	17
Birdsboro,	2,700	77	47	17.7	6	.....	12	.....	24	5	1	.....	.....	.....	20	.....	24	22
Blakely,	4,500	45	28	6.2	2	.....	4	1	4	1	.....	.....	.....	.....	.....	.....	23	23
Blairsville,	4,800	41	63	11	9	1	5	.....	47	3	1	.....	4	4	10	.....	30	26
Bridgeport,	3,500	46	41	13	3	1	2	1	6	2	1	.....	.....	.....	.....	.....	.....	.....
Bridgeport school district, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bristol,	7,000	163	.....	23	3	.....	2	.....	.....	2	.....	.....	.....	19	.....	.....	55	55
Brookville,	2,472	17	.....	6.9	.....	.....	13	.....	8	.....	.....	.....	.....	.....	1	.....	752	752
Butler,	16,000	61	170	10.6	6	1	28	1	38	8	3	.....	.....	.....	12	.....	20	20
Canton,	1,524	19	18	11.8	5	.....	26	1	2	.....	.....	.....	.....	.....	.....	.....	15	15
Carbondale,	13,536	275	262	18.6	22	5	1	.....	42	6	2	.....	.....	.....	91	.....	.....	.....
Carlisle,	9,409	133	146	14.1	3	2	2	.....	7	1	.....	.....	11	.....	1	.....	.....	.....

Tabular Abstract of Annual Reports of Boards of Health of Cities and Boroughs—Continued.

Name of City or Borough.	Population.	Births.	Deaths.	Death rate per 1,000.	Diphtheria and Croup.		Scarlet Fever.		Typhoid Fever.		Small-Pox.		Consumption.		Measles.		Nuisance.	
					Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Reported.	Abated.
Carrolltown.	1,200	39	12	10			16	2	7	1			12	12	10	1	4	4
Catawissa.	2,399	14	29		1				4	1			10	5	14		4	4
Clinton.	2,164	29	18	8.2	2	1			4	1			10	5	14		7	4
Columbia.	8,700	186	147	18.3	7	1	19	2	10	4	35	1	6	6	3		25	23
Coudersport.					9	1	9		14								100	100
Crafton.					9	1	5		47	3					100		12	9
Cresskill.	1,259	98	7	4.6	6	1	6	2	6		8		1					
Dallastown.					4	1	5											
Danville.	8,000				31	7	5		4		2				19		73	73
Dayton.	559				1		3		1								6	10
Downingtown.	2,300	66	34	15.6	3	1	3		4		3				1		18	16
Boylestown.	3,024	38	39	19	4		1		21	3					28		16	16
Bufole.	11,000		138	12.5	9	2	16	2			18	3			72		56	52
Buncannon.			26						1	1			1	1	2	2	13	13
Bunnore.	15,000	181	183	12.2	16	2	2		4	1			5	5	4	1	18	18
Eaglesmere.	300																	
East Bangor.	1,009	25	8	8			4				1							
East Berlin.	675				2	2			1				3					
East Brady.	1,100	34	18	12.8									1	1			35	35
Elensburg.	1,600	29	8	5					5									
Eldersburg.	840	9	3	7.1							1							
Edenburg.	704	9	4	5.6					1				1	1			10	10
Edgewood.	1,500	8	14	9.3	1		5		1						2		3	3
Ellitt.	7,000	11	33	7.8	3	1	3			4	20	1	7				10	10
Elizabethtown.	1,650	7	4.1		1				2								18	18
Emmaus.							1						2				25	25
Eminton.	1,550	40	19	12.2	2		4		12	1							20	13

[illegible]

[illegible]

Tabular Abstract of Annual Reports of Boards of Health of Cities and Boroughs—Continued.

Name of City or Borough.	Population.	Births.	Deaths.	Date rate per 1,000 persons living.	Diphtheria and Croup.		Scarlet Fever.		Typhoid Fever.		Small-Pox.		Consumption.		Measles.		Reported.	Nuisance.
					Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Wayne.	2,840	62	30	10.7	3	2	2	3			15	1					30	27
Weatherly.	500																	
Wells.	3,000	45	23	7.3	1		4				4		2	2	100		2	2
Wellston.	1,500	25	10	6.6														
Wells township.	3,700	69	51	13.7	26	5	9	4	13	2	1	1	1	1	5		71	71
West Bethlehem.	1,300	18	17	13			1		5		1				20		15	15
West Bridge-water.	10,000		15	15.8	6		20			1	2			16				
West Chester.	1,030	23	6	6	1													
West Eastern.	1,300																	
Westfield.	1,300								12	1							10	10
West Hazleton.	2,810	35	45	16			5	1									7	7
West Pittston.	6,231	58	68	10.9	20	4	6		3		5		1	1	4		151	132
Williamsport.	20,000	219	386	12.8	143	8	123		71	12	8			30			487	400
Wycox.	1,244						4		8	1								
Yeadon.	750	9	10	13.3			4	1										
York.	37,000	671	485	13.3	53	3	72	3	88	11	19	6		42	240		3	

ABSTRACTS OF ANNUAL REPORTS OF CITIES AND BOROUGHS FOR THE YEAR 1902.

Abington, Montgomery County.

Contagious diseases not always reported, but when they are the houses are placarded. Influenza was unusually prevalent during the year. A better water supply is needed.

Alden, Delaware County.

Contagious diseases reported. Houses placarded and quarantined. Partial registration enforced, including that of vaccination of school children. A sewerage system is needed in this borough.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$25.00 per annum.

Allentown, Lehigh County.

Death Rate.

Excluding still births there were 664 deaths and 894 births reported. The death rate on an estimated population of 38,000 is 17.47 per 1,000. This is higher than last year, when the rate was 15.58, but is accounted for by the typhoid fever epidemic during the latter part of the year, when 504 cases were reported, with 47 deaths. The diseases causing the largest number of deaths were typhoid fever 75, heart disease 63, tuberculosis 59, pneumonia 41.

During the year a number of cases were reported to this office as suspected small-pox. They were immediately investigated and diagnosed as follows: Small-pox 4, chicken-pox 3, German measles 1.

Vaccination.

As will be seen from the report under the head of small-pox each time a case of this disease was discovered, all persons as far as it was possible to locate them, who had been directly or indirectly exposed, were promptly vaccinated. In the case of the H. family, a member of which worked in the Adelaide silk mill, the vaccinations reached several hundred, all of which were done by their re-

spective medical attendants, as their certificates to the Superintendent showed.

When small-pox first made its appearance citizens were requested, through the daily papers, to be promptly vaccinated and it is believed the advice was kindly taken and cheerfully complied with.

School children are all vaccinated with the exception of those few who from sickness or other causes, by the advice of their family physicians, were not fit subjects at the time for that operation.

Small-pox.

On August 9th the first case of small-pox was reported, that of a negro who came from New York City the day previous. The second case, that of a baker who contracted the disease at or near Tipton, was reported August 31. The third case, a hostler, boarding on Cedar street, was reported on September 1. All three cases were at once investigated, and upon being true small-pox were immediately, none having a home, sent to the county pest house, and the inmates of their boarding houses vaccinated, the buildings disinfected with formaldehyde, bedding, etc., in use by the patients destroyed and a rigid quarantine established, with guards at both fronts and rears of the buildings. The next, and last case, that of the H. family, before referred to, was reported on September 18. The mother and child were visiting at Pen Argyl, in a house where there existed a case of so-called chicken-pox. After their return to this city, they too developed the disease. Upon investigation and consultation with the family doctor and the board's staff of consulting physicians the cases were pronounced small-pox and quarantined absolutely as the preceding ones, with no further spread of the disease.

In this connection the health officer of the city makes the following suggestion:

"The trouble and dissatisfaction we had in taking our cases of this character to the county pest house evidences the need of a municipal hospital for contagious diseases. As this seems at present out of the question, I would suggest and urge that a portable hospital be procured so that, should another out-break occur, we will be able and ready to humanely take care of the unhappy victims."

Scarlet Fever.

With the exception of April and May, the city had very little scarlet fever in 1902. During those two months an out-break occurred, which, at one time, threatened to become an epidemic. Fortunately, it was confined to one section of the city, namely the First and Sixth wards.

The present method of placarding houses only, and relying on the honor of the inmates to obey instructions serves, on the whole, very well, and in only a few instances was it necessary to institute legal proceedings against persons violating quarantine rules. One was fined five (\$5.00) dollars and three were dismissed with a reprimand.

Diphtheria.

Sixty-five cases of diphtheria were reported to the health office during the year, most of which were of a mild type. In the treatment of this disease antitoxin has been generally used and with excellent results.

In all those cases where the family was unable to pay for this remedy it has been supplied free of charge.

Nuisances.

The total number of nuisances reported and investigated were 1,317, and 1,310 were abated. Cesspool cleaner's permits granted, 496.

Garbage.

Up to December 15 garbage as collected was taken to Kline's island and dumped upon the ground and plowed under. Since that time it has been taken to the city crematory for its incineration.

This method is by far the most satisfactory from a sanitary point of view.

Milk.

The milk supply of this city has not at all times been up to the standard and to overcome this difficulty councils, upon the recommendation of the board of health, on October 15, passed an ordinance which went into effect November 17, regulating the sale of this commodity, and licensing the venders. The dealers are now all supplied with a license tag, posted in a conspicuous place on their wagons or carts, and it is proposed to make frequent inspections as to the purity of milk, conditions of stables, etc., as soon as the necessary assistance can be procured. The results thus far obtained have justified the wisdom of this step in the direction of obtaining a pure food supply.

Water.

The water supply, of which Allentown was and is so justly proud, was, during the fall months, contaminated by surface and sewage drainage, thereby causing an epidemic of typhoid fever which laid 504 people on a bed of sickness and caused the death of 47.

A note of warning has been sounded time and again of the danger of having the water supply so near to the built-up portion of the city without proper sewage. With its natural environments, Allentown has no excuse for having these visitations of typhoid fever, with all the suffering and loss of life it necessarily entails. The antiquated method of sewage disposal practiced here is nothing short of criminal when the expenditure of a few hundred thousand dollars would save scores of lives annually.

Causes of Death—1902.

Allentown.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	So. temper.	October.	November.	December.	Total.
Accidents,					1		1	3	3	2		2	12
Accident, burns,			1								1		3
Accident, drowning,			1				1					1	3
Accident, fractured skull,							1	1					2
Accident, fractured hip,							1						1
Poisoning,								1					1
Anaemia,							1	1					2
Anaemia, pernicious,									1				1
Asphyxia,												2	2
Angina pectoris,										1	1		2
Apoplexy,	2	2	2	7	2	3	2		2	1	2	5	31
Appendicitis,							1						1
Asthenia,	1	2	1	3		3		1	1		5	3	20
Asthenia due to age,	3	2		1	3	2	1	1	1	5	2		21
Bowels, obstruction of,		1		1				1		1			4
Brain, inflammation of,		1		1	1	1	1	1	1				7
Brain, softening of,			1					1					2
Bronchitis,								1				1	2
Bronchitis capillary,											1		1
Biliary calculi,						1		1					2
Cancer,	1	1	1	2	1	1	1	1	3		1		13
Cancer of liver,			2		1		1						4
Cancer of uterus,											1	2	3
Cancer of stomach,		1		1		1				2	1		6
Cancer of bladder,						1							1
Cholera infantum,		1				1	7	5	6	1			21
Coma,			1										1
Convulsions,		3	3			2			1	1		1	11
Congestion of brain,		1						1			1	1	4
Congestion of lungs,		1				1							2
Croup, diphtheritic,						1		1					2
Croup, membranous,			1							1			2
Croup, spasmodic,		1											1
Diabetes,		1		1		1			1		1	1	5
Diphtheria,	2	4	2		2	1				1	2	1	15
Droopy,		4		2		2	1				5	4	18
Dysentery,			1			2		3		1			7
Enteritis,	1	2	1				1	2		1	1	1	10
Endocarditis,			1				1						2
Gastritis,	1	1			1	1	1			1	1	1	8
Heart disease,	4	3	5		2	3	1	3					21
Heart hypertrophy,								1				1	2
Heart paralysis,	2	1			5	5	3	3	2	4		5	30
Heart pericarditis,				1	1								3
Hemorrhages,				1	3	1		1		1			7
Hepatic cirrhosis,										1			1
Hepatitis,						1			1				2

Causes of Death—1902—Continued.

Allentown.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Hydrocephalus,									1				1
Jaundice,							1						1
Laryngitis oedematous,	1												1
La grippe,			1										1
Marasmus,		1		1	1			5	5	9	6	1	33
Meningitis,		2	2		3			3	5	1		1	18
Meningitis, tubercular,											1		1
Measles,											1		1
Nephritis,		1		4	1	1	2	4	1	1	2	4	21
Paralysis,		1					1					1	3
Pertussis,					1		2		1				4
Paresis,										1			1
Peritonitis,	3					1		2				1	7
Puerperal convulsions,											1		1
Pyaemia,		1			1								2
Pneumonia,	3	7	1	4	6	2	1	2	1	2	2	10	41
Prostatitis,						1							1
Premature birth,	3		2			2	2	5	2	2	1	6	27
Rheumatism,		1											1
Skull fracture,	1												1
Scarlet fever,			1		5		1	2		1			10
Still born,	1	7	6	4	3	6	2	2	3	4	5	5	48
Stomach ulceration,			1										1
Suicide,				1			1	1					3
Scrofula,		1											1
Syphilis,											1		1
Spina bifida,						1							1
Spinal sclerosis,							1						1
Tetanus,							1						1
Tuberculosis,	7	5	6	6	7	2	5	5	4	3	7	2	59
Typhoid fever,	1	3	8	1	3	2		3	4	31	11	4	71
Uraemia,	2	1	2	1					1	2		3	12
Valvular disease of heart,	2	2		1		1			3			3	12
Varicella,							1						1
Total,	52	61	54	46	55	53	57	67	58	75	59	75	712

Deaths by Months—1902.

January,	52	August,	67
February,	61	September,	58
March,	54	October,	75
April,	46	November,	59
May,	55	December,	75
June,	53		
July,	57	Total,	712

The principal diseases causing death during 1902 are as follows:

Typhoid,	71	Apoplexy,	31
Heart disease,	63	Cancer,	27
Tuberculosis,	59	Nephritis,	21
Pneumonia,	41	Meningitis,	18
Asthenia,	33		

Nativity of Those Who Died in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Allentown,	26	37	25	18	34	27	36	44	28	42	22	31	370
Pennsylvania,	21	14	24	16	13	15	16	15	23	28	28	28	291
United States, outside of Pennsylvania, ..	1	1	1	....	1	2	1	1	....	1	....	....	9
Germany,	1	3	3	7	4	4	2	3	4	2	1	6	40
Ireland,	1	4	....	3	1	5	....	3	1	2	1	4	25
Russia,	1	....	....	....	....	....	....	....	1	....	....	....	2
Austria, .....	....	....	....	....	....	....	1	....	....	....	1	1	3
Italy, .....	....	1	1	....	....	....	....	....	1	....	....	1	4
Hungary, .....	....	....	....	1	....	....	1	....	....	....	1	....	3
England,	1	....	....	....	1	....	....	1	....	....	....	....	3
Switzerland, .....	....	....	....	1	....	....	....	....	....	....	....	1	2
Canada, .....	....	....	....	....	1	....	....	....	....	....	....	....	1
Unknown, .....	....	1	....	....	....	....	....	....	....	....	5	3	9
Total,	52	61	54	46	55	53	57	67	58	75	59	75	712

Deaths by Ages—1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Still born,	8	6	6	4	2	3	4	6	3	4	5	5	56
Under 1 year,	5	15	5	8	6	13	16	19	19	7	5	16	124
1 to 5 years,	4	7	5	....	8	4	7	4	5	5	3	2	54
5 to 10 years,	4	2	3	2	6	1	3	4	2	3	4	2	36
10 to 20 years,	1	5	1	1	6	....	2	1	1	6	2	6	32
20 to 30 years,	12	12	6	2	4	7	4	5	7	13	5	6	63
30 to 40 years,	8	1	7	4	5	3	4	8	5	9	4	4	62
40 to 50 years,	4	3	4	12	6	5	1	3	1	11	7	5	52
50 to 60 years,	3	5	4	6	4	2	4	6	4	4	8	9	59
60 to 70 years,	2	8	5	5	6	3	4	6	4	3	10	11	70
70 to 80 years,	6	4	5	7	....	6	5	4	4	4	2	6	53
80 to 90 years,	3	2	1	2	....	4	2	....	3	3	4	3	27
90 to 100 years, .....	....	....	....	....	....	....	....	....	....	1	....	....	1
Unknown,	2	1	2	....	2	2	1	1	....	2	....	....	13
Total,	52	56	54	46	55	53	57	67	58	75	59	75	712

Number of Births in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Male,	39	35	41	32	50	45	41	47	42	32	40	40	484
Female,	32	44	31	23	36	47	42	33	34	26	21	40	410
Total,	72	79	72	55	86	92	83	80	76	58	61	80	894

Allentown.
Comparative Report of Contagious Diseases for Each Year Since 1894.

	Diphtheria.		Scarlet Fever.		Typhoid.		Measles.		Small-Pox.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1894.	76	17	51	2	70	7	456	7	.....	.....
1895.	227	60	52	2	337	40	40	1	.....	No quarantine.
1896.	155	41	91	5	128	15	4	.....	.....	Close quarantine from September.
1897.	85	23	35	2	46	10	39	1	.....	Close quarantine.
1898.	62	19	97	2	91	19	212	6	.....	Close quarantine.
1899.	73	19	378	6	130	22	6	.....	.....	Close quarantine.
1900.	65	20	120	5	141	9	69	2	.....	Isolation and quarantine from June 4.
1901.	68	15	35	.....	82	17	136	.....	.....	Isolation and quarantine during 1900.
1902.	65	17	74	10	565	66	131	1	6	Isolation and quarantine during 1901.
								1	1	Isolation and quarantine during 1902.

Salary of secretary, \$360.00 per annum.

Salary of health officer, \$500.00 per annum.

Salary of sanitary inspector, \$600.00 per annum.

Alliance, Northampton County.

Contagious diseases reported. Houses placarded and quarantined.
General registration enforced.

Salary of secretary, \$60.00 per annum.

Salary of health officer, \$100.00 per annum.

Altoona, Blair County.

During the past year the sanitary laws have been rigidly enforced and the sanitary condition of the city will compare favorably with former years. The death rate during the year has decreased slightly over the year 1901, although the population has largely increased.

The number of cases of contagious diseases have decreased considerably over the year 1901, except small-pox, which shows a large increase over that year. Of the 91 cases of scarlet fever, but three deaths resulted. Of the 64 cases of diphtheria, but 14 deaths resulted. Of the 64 cases of small-pox in the city but 2 deaths resulted from the disease, showing that it was handled in a scientific manner by the physicians and others who had charge of same. All cases were closely quarantined and in the small-pox cases an officer visited them twice a day.

A resolution was passed by the board of health early in the fall, requiring all houses which were quarantined for contagious diseases to be disinfected by the health officer in the future, free of charge to the parties living therein. It is believed this course of procedure will have a beneficial effect on the health of the community, as the board in future will be certain that all houses are properly disinfected and thereby retard the spread of contagious diseases.

It is recommended that arrangements be made that the city can provide for its citizens in case of epidemics of small-pox or other contagious diseases by the building of a city hospital suitable for this purpose.

Vital Statistics.

The total number of interments for the year ending December 31, 1902, was 771. Of this number 55 were brought from other places and interred in Altoona city and suburban cemeteries, making the exact number of deaths in the city for the year 716. Estimating the population of the city at 55,000 it gives a death rate of 13.01 per 1,000 population. Deducting 83 deaths resulting from accidents, suicides and still births, the death rate is further reduced to 11.51 per 1,000, which is the death rate from disease.

The comparative mortuary table 1886 to 1902, inclusive, shows a large decrease in deaths over the year 1901, except in small-pox. There is also a decrease in the number of deaths from contagious diseases over previous years.

The following tabulated statement shows the number of marriages, births and deaths; also gives sex, color, social relations, ages and nativity as reported each month during the year 1902:

Allentown.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
I. Marriages,	24	26	19	36	27	57	25	31	49	53	42	39	431
II. Births:													
White males,	39	41	53	36	44	45	44	55	44	42	41	45	557
White females,	42	51	52	41	43	56	31	55	35	43	42	41	542
Colored males,	1	1	1	1	1	1	1	1	1	1	1	1	3
Colored females,	1	1	1	1	1	1	1	1	1	1	1	1	4
Total,	102	106	107	85	87	101	75	111	80	85	81	89	1,106
III. Number of deaths:													
From disease,	51	42	53	59	44	53	56	59	52	58	59	39	626
From accident,	6	5	8	2	7	5	9	6	14	19	11	8	91
From suicide,	1	1	1	1	1	1	1	1	1	1	1	1	5
Still born,	7	7	2	7	2	3	8	2	1	3	3	4	49
Total,	64	56	63	69	54	61	73	67	67	72	71	51	771
IV. Sex and color:													
White males,	37	32	36	30	50	37	38	37	40	42	39	30	428
White females,	27	23	26	38	23	23	33	28	27	30	34	19	331
Colored males,	1	1	1	1	1	1	1	2	1	1	1	2	10
Colored females,	1	1	1	1	1	1	1	1	1	1	1	1	2
Total,	64	56	63	69	54	61	73	67	67	72	71	51	771
V. Social relations:													
Married,	25	19	23	23	17	28	17	26	18	30	29	20	275
Single,	31	33	32	36	27	25	53	37	41	33	35	26	412
Widowers,	1	1	1	4	2	2	1	3	1	2	4	2	22
Widows,	4	3	6	6	3	3	2	1	5	5	2	2	42
Not stated,	2	1	1	1	5	3	1	1	2	2	4	1	29
Total,	64	56	63	69	54	61	73	67	67	72	71	51	771
VI. Ages:													
Under 1 year,	13	9	12	11	11	8	32	23	13	16	11	9	168
1 to 5 years,	1	1	7	5	5	3	6	4	6	3	8	4	56
5 to 10 years,	1	1	4	2	1	1	1	1	2	1	1	1	14
10 to 20 years,	3	1	2	3	6	1	4	3	8	2	5	3	41
20 to 30 years,	10	8	4	9	7	9	5	2	16	11	4	5	81
30 to 40 years,	8	6	8	5	6	8	4	6	4	9	10	7	81
40 to 50 years,	5	8	9	10	4	11	7	9	8	10	12	12	105
50 to 60 years,	9	4	4	6	6	8	3	9	13	8	7	2	79
Over 60 years,	6	6	11	11	6	6	4	8	2	9	9	5	83
Still born,	7	7	2	7	2	5	8	1	1	3	3	4	50
Not stated,	1	5	1	1	1	1	1	1	1	1	1	1	13
Total,	64	56	63	69	54	61	73	67	67	72	71	51	771

Cause of Death—Continued.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Heart disease,	4	2	2	7	3	4	3	1	4	1	5	4	40
Hemorrhage,	1	...	7	3	1	1	2	...	1	1	...	1	18
Hernia, .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Hodgkin's disease, .....	...	...	...	...	1	1	...	1	...	...	...	...	3
Hydrocephalus, .....	...	...	...	...	...	...	1	...	...	...	...	...	1
Inanition,	2	1	...	...	...	1	...	6	...	1	3	...	14
Icterus,	1	...	1	...	...	...	...	...	1	...	...	...	3
Jaundice, .....	...	...	...	...	...	...	...	...	...	1	...	1	2
Kidney, diseases of, .....	...	...	...	...	1	...	...	...	...	...	...	...	1
Lung, diseases of,	1	...	1	1	...	...	...	2	...	1	...	...	6
Liver, diseases of,	1	1	...	...	...	...	...	1	...	...	...	...	3
Marasmus,	1	...	3	2	3	3	2	4	6	7	2	1	34
Meningitis,	2	...	3	2	2	2	3	1	...	1	3	1	20
Measles, .....	...	1	1	...	1	...	...	...	...	...	...	...	3
Myocarditis, .....	...	1	...	1	1	2	...	1	...	...	...	...	6
Malignant growth of limb, .....	...	...	...	...	...	...	...	...	...	...	1	...	1
Nephritis, .....	...	1	...	1	...	1	...	1	...	2	...	...	6
Neuralgia, .....	...	...	...	2	...	...	...	...	...	...	1	...	4
Old age debility,	1	3	3	4	1	1	3	4	...	5	2	1	28
Obliteration, .....	...	...	1	...	...	...	...	...	...	...	...	...	1
Pneumonia,	4	8	3	5	1	4	2	2	1	1	4	3	38
Paralysis,	2	2	4	2	2	2	...	3	2	2	3	1	25
Premature,	2	1	2	1	2	1	2	1	3	2	2	1	17
Peritonitis,	1	1	1	1	3	1	...	1	...	2	...	1	12
Phthisis,	1	1	4	2	...	2	1	2	1	2	...	...	15
Rheumatism,	2	1	...	2	...	1	...	...	...	...	...	...	5
Suicide, .....	...	1	...	1	1	...	...	...	...	1	1	...	5
Strangulation, .....	...	...	...	...	...	...	...	...	...	...	...	1	1
Septicemia,	3	1	...	2	1	...	...	...	1	1	1	...	9
Scrofula, .....	...	...	1	...	...	...	...	1	...	...	...	...	2
Suffocation, .....	...	...	1	...	1	...	...	...	...	...	...	...	2
Still born,	7	7	2	7	2	3	8	2	1	3	3	4	46
Small-pox, .....	...	...	...	...	...	...	...	1	...	...	...	1	2
Shock from operation, .....	...	...	...	...	...	...	...	...	...	...	1	2	3
Syphilis tertiary, .....	...	1	...	...	...	...	...	...	...	...	...	...	1
Spina bifida, .....	...	1	...	...	...	...	...	...	...	...	...	...	1
Tuberculosis,	3	3	...	4	2	6	1	2	4	2	4	2	32
Uraemia, .....	...	2	...	2	...	...	...	...	...	2	...	...	6
Tetanus, .....	...	...	...	...	...	...	...	1	...	...	1	...	2
Sunstroke, .....	...	...	...	...	...	...	1	...	...	...	...	...	1
Whooping cough, .....	...	...	...	...	...	...	...	...	...	...	1	...	1
Not stated, .....	...	...	...	...	5	2	...	1	1	...	...	...	9
Totals,	64	56	63	69	54	61	73	67	67	72	74	51	771

Contagious Diseases by Months.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Typhoid fever,	4	1	4	10	7	3	8	19	26	30	17	2	131
Scarlet fever,	15	3	7	10	12	7	4	3	3	8	10	9	90
Diphtheria,	4	5	3	2	7	6	4	4	5	10	10	10	70
Small-pox,	5	...	...	5	1	1	1	4	4	19	6	17	63
Chicken-pox, .....	...	...	...	...	...	...	...	...	...	...	28	11	39
Total,	28	9	14	27	27	17	17	30	38	67	71	49	394

Allentown.
Comparative Mortuary Table, 1886 to 1902, Inclusive.

	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Population,	26,000	28,040	30,000	33,740	35,000	36,000	38,000	38,000	40,000	41,100	41,700	42,000	42,500	43,000	43,973	44,400	55,000
Total deaths,	260	476	484	588	581	656	707	671	623	654	575	586	533	661	680	650	716
Death rate per 1,000 population, ...	16.45	17.00	16.13	17.42	16.06	18.74	18.60	17.65	15.57	15.91	13.78	13.95	12.51	15.37	15.46	14.64	12.01
Rate per 1,000, omitting accidents, suicides and still births,			14.12	15.53	14.95	16.22	16.02	14.71	13.10	13.31	11.55	12.35	10.58	13.79	13.53	12.79	11.51
Consumption,			37	35	40	57	60	47	49	61	47	46	44	45	55	43	41
Pneumonia,			53	49	46	44	73	55	38	39	34	48	48	52	66	74	38
Cholera Infantum,			24	43	42	44	32	45	33	36	30	24	27	26	34	26	26
Diphtheria and croup,			10	27	14	13	3	12	11	21	29	38	15	23	55	19	14
Scarlet fever,			3	1	6	2	20	30	3	17	7	3	3	3	8	6	6
Typhoid fever,			16	18	13	19	20	9	28	21	13	16	13	14	15	11	20

The contagious and infectious disease reported in the city and suburbs during the past year by months shows a marked decrease except small-pox over the year 1901. Three hundred and ninety-four cases were reported during the year, a decrease of 172 over the year 1901. Of these 394 cases, 32 deaths resulted. All of these 394 cases were promptly quarantined, premises inspected and each case closely followed by the officers of this department until finally released from quarantine.

During the year the board insisted upon all infected houses being disinfected by formaldehyde gas by our health officer.

The following houses were disinfected:

	Houses.	Rooms.	Cubic Feet.
Scarlet fever,	27	75	179,300
Diphtheria,	43	111	286,200
Small-pox,	42	284	883,000
Other diseases,	4	9	22,000
Total,	116	479	1,370,500

This disinfection has been the means of preventing the spread of contagious diseases, as but few additional cases developed after disinfection.

Salary of secretary, \$35.00 per month.

Salary of health officer, \$60.00 per month.

Archbald, Lackawanna County.

Contagious diseases reported. Houses placarded and quarantined.
General registration enforced.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$50.00 per annum.

Salary of sanitary officer, \$30.00 per annum.

Arnold, Westmoreland County.

Contagious diseases not reported, but as far as possible houses have been placarded and quarantined. Registration not enforced, excepting vaccination of school children.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$10.00 per month.

Ashley, Luzerne County.

Contagious diseases reported. Houses placarded and quarantined. A larger sewerage system is needed. The board has procured a Milford formaldehyde regenerator, which has been used wherever fumigation was necessary and has given much satisfaction.

Partial registration enforced, including vaccination of school children.

Salary of secretary, \$100.00 per annum.

Salary of sanitary officer, \$10.50.

Atglen, Chester County.

Contagious diseases reported. Houses placarded and quarantined. General registration enforced.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$4.00 per annum.

Avalon, Allegheny County.

It is a matter of congratulation that the board of health records this year will demonstrate that the sanitary condition of the borough has improved.

This result is no doubt in a large measure due to the public improvements in the way of water supply and sewerage, as well as the unabated efforts of the board to prevent the spread and communication of such contagious and infectious diseases as occur, together with the prompt abatement of all nuisances that come within its knowledge.

Measles, scarlet fever, typhoid fever and whooping cough, generally of a mild type, prevailed during the year, but fortunately no deaths occurred from these diseases.

Another notable fact is that pneumonia is first and consumption second in the comparative table of the greatest number of deaths.

The board recommends the building of a garbage crematory for the proper disposal of the borough's garbage, which would fill a long-felt want.

Communicable diseases during the year:

Name of Disease.	Number of cases.	Deaths.	Houses inspected.
Measles,	73	.....	61
Typhoid fever,	13	.....	13
Diphtheria,	3	1	4
Membranous croup,	1	.....	1
Scarlet fever,	14	.....	9
Small-pox,	1	.....	1
Consumption,	8	3	.....

The above-named diseases, with the exception of consumption, are reported to the board by the physicians in attendance, in accordance with the law requiring such reports. All houses in which diphtheria, scarlet fever and small-pox occurred were placarded and fumigated by the health officer.

Serious danger threatened, for a time at least, this community from an outbreak of small-pox in Ross township, in close proximity to our borders. Fortunately, the spread of the dread disease was arrested, being limited to two cases confined to the township named, owing to the prompt and vigorous action on the part of our health officer in behalf of the board of health, and Dr. Miller, the physician in attendance, who promptly quarantined the infected district.

The annual inspection of the borough was made in the months of April and May by the health officer. Seventeen nuisances were reported by residents of the borough, all of which were abated within the proper time.

Number of cesspools abandoned on account of inside closets connected with sewers, 11.

Births.

Total number of births during the year, 64, against 45 in 1901.

	Male.	Female.	Total.
White,	33	29	62
Black,	1	1	2
Total,	34	30	64

Deaths.

Total number of deaths, 37, against 36 in 1901.

Pneumonia,	5	Dilatation of heart, passive,	1
Tuberculosis,	3	Thrombus,	1
Carcinoma of stomach,	1	Gun-shot wound,	1
Uraemic coma,	1	Bronchial asthma,	1
Gastric and intestinal catarrh,	1	Still born,	3
Acute intestinal indigestion,	1	Heart failure,	1
Septicaemia,	1	Cholera infantum,	2
Abnormal heart,	1	Spasms,	1
Acute gastritis,	1	Hemorrhage due to knife wound with	
Capillary congestion of lungs,	1	suicidal intent,	1
Cerebral hemorrhage,	1	Pulmonary embolism,	1
Eutero colitis,	2	Diphtheria,	1
Cerebral apoplexy,	1	Disease at base of brain,	1
Drowned in Ohio river,	1		
Bright's disease,	1	Total,	37

We enforce the registration of births, still births, plumbers, deaths and vaccination of school children.

Salary of secretary, \$64.80 per annum.

Salary of health officer, \$677.00 per annum.

Avondale, Chester County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced, excepting that of births.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$15.00 per annum.

Bath, Northampton County.

Contagious diseases reported and houses quarantined. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$15.00 per annum.

Salary of health officer, \$12.00 per annum.

Bellevue, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined.

The work of the board of health during the past year has been chiefly along the lines of sanitary and plumbing inspection, and the control and suppression of contagious diseases.

During the month of May the health officer made 755 house inspections, which practically included every house in the borough. Thirty-seven nuisances were found and abated. These inspections were made without additional expense to the borough, as the health officer is also sewer inspector. One dozen dead animals were removed from the public streets. Six houses were disinfected after the presence of contagious diseases.

The plumbing inspector has made 78 plumbing inspections and 90 sewer inspections. Seventeen plumbers took out registration certificates from the board during the past year.

Deaths.

Fifty-seven deaths occurred, for which burial permits were issued. Of these 13 were transportation permits.

Of the deaths 27 were male, 30 female; 2 were colored.

Causes of Deaths.

Abscess of liver, 1; acute nephritis, 1; acute bronchitis, 2; apoplexy, 1; cholera infantum, 2; chronic nephritis, 4; cancer of liver, 1; convulsions, 3; erysipelas, 1; gastric paresis, 1; gastro-enteritis, 1; heart diseases, 12; killed by train, 3; marasmus, 2; meningitis, 2; morphinism, 1; obstruction of bowels, 1; old age, 1; pneumonia, 5; paralysis, 2; pelvic peritonitis, 1; sarcoma of skull, 1; still born, 2; septocaemia, 1; typhoid fever, 1; tuberculosis, 3.

Classified as to nativity the dead were as follows:

Born in Bellevue,	13
Pennsylvania,	33
America,	42
Germany,	4
Ireland,	4
England,	3
France,	1
Austria,	1
Switzerland,	1
Wales,	1

Classified as to age, as follows:

Still born,	2
Under 1 year,	10
Between 1 and 5 years,	4
Between 5 and 10 years,	1
Between 10 and 20 years,	3

Between 20 and 30 years,	3
Between 30 and 40 years,	5
Between 40 and 50 years,	5
Between 50 and 60 years,	7
Between 60 and 70 years,	7
Between 70 and 80 years,	9
Aged 94 years,	1
<hr/>	
Total,	57
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Births.

During the year 63 births occurred, of which 33 are male and 30 are female; 4 are colored.

Classified as to parentage as follows:

- 56 were born of American parents.
- 2 were born of English parents.
- 2 were born of German parents.
- 1 was born of Irish parents.
- 1 was born of Belgium parents.
- 1 was born of Greek parents.

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Contagious Diseases.

Seventy cases of contagious diseases were reported during the year, as follows:

- Measles 47, with 2 deaths.
- Typhoid fever 10, with 1 death.
- Scarlet fever 6, with no deaths.
- Small-pox 3, with no deaths.
- Diphtheria 2, with no deaths.
- Mumps 2, with no deaths.

During the year the board purchased a modern disinfecting apparatus, which is used by the health officer after the death or recovery of a case of contagious disease.

As predicted in the report made at the close of last year, small-pox has appeared in the borough. The board has taken most vigorous measures to stamp it out, and so far has in each instance prevented its spread beyond the original focus.

A sanitary physician has been employed to take charge of cases and to vaccinate under the direction of the board of health.

While considerable expense has been incurred by this and by main-

taining a quarantine, the board feels that they are justified in these measures and have the support of the community.

The board has repeatedly urged the utmost importance of vaccination by circulars and posters and has enforced the law requiring all school children to be vaccinated.

Ben Avon, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced.

Salary of secretary, \$30.00 per annum.

Bendersville, Adams County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced.

Salary of secretary, \$6.00.

Salary of health officer, \$7.00.

Birdsboro, Berks County.

Contagious diseases reported. Houses placarded and quarantined.

An epidemic of typhoid fever occurred during the year, which was attributed to impure reservoir water. Partial registration is enforced, including that of vaccination of school children.

Salary of secretary, \$30.00 per annum.

Salary of health officer, \$50.00 per annum.

Blakely, Lackawanna County.

Contagious diseases reported. Houses placarded and quarantined. Partial registration is enforced and compulsory vaccination of school children.

Salary of secretary, \$70.00 per annum.

Salary of health officer, \$50.00 per annum.

Blairsville, Indiana County.

Contagious diseases reported. Houses placarded and quarantined. Diarrhoeal diseases of children were unusually prevalent during

the year. The sewerage system of the borough should be improved. Registration is partially enforced, including that of vaccination of school children.

Salary of secretary, \$6.00 per month.

Salary of health officer, \$5.00 per month, except during epidemics, when it is increased to \$40.00 per month.

Bridgeport, Montgomery County.

Contagious diseases reported. Houses placarded and quarantined. The sewerage system should be extended. Registration of still births and of vaccination of school children enforced.

Salary of secretary, \$10.00 per month.

Bridgeport School District, Westmoreland County.

Contagious diseases reported. Houses placarded and quarantined.

Bristol, Bucks County.

Contagious diseases reported. Houses placarded and quarantined.

Brookville, Jefferson County.

Contagious diseases reported. Houses placarded and quarantined. A mild form of scarlet fever was epidemic, which necessitated closing the schools for a time. Registration of undertakers and that of vaccination of school children are enforced.

Salary of secretary, \$50.00 per annum.

Health officer paid in fees for each visit.

Butler, Butler County.

The town has been in a fairly good condition during the past year, speaking from a sanitary standpoint.

Four cases of small-pox occurred during the year. The board of health went to work with determination to prevent the disease from spreading by isolation, vaccination and fumigation; these rules were

faithfully and conscientiously observed in Butler and the result was that not a single case was contracted by any one except those who contracted it before coming to Butler.

Contagious Disease Hospital.

A building has been erected as a hospital for infectious diseases, which was a wise move and one that will prove a great benefit.

Milk Dairies.

During the year several dairies have been inspected, and in two instances parties have been prohibited furnishing milk while there was scarlet fever in their families.

Hearing of a sickness of some hogs in the neighborhood, the officers of the board, with the County Medical Inspector and a veterinary surgeon, visited the slaughter pens of several butchers, and found many of the hogs sick. They quarantined all of them and gave orders that no other hogs should be permitted to come in contact with those suffering, or those exposed to the sick ones, which orders were carried out by the owners. There were 78 hogs either suffering from the disease or in confinement with such; they were all condemned as unfit for food until all appearance of disease had passed. Since that time 33 of said hogs have been reported as dead from the disease, 6 more were killed and buried and the rest are still under quarantine. The disease was conveyed to the premises of the Butler butchers by the purchase of infected hogs.

Nuisances and Other Statistics.

Number of outside water closets condemned and cleaned,....	565
Number of other nuisances of serious nature abated,	187
Number of houses quarantined,	50
Number of houses released from quarantine,	50
Written notices served on principals of schools on account of contagious diseases,	50
Permits issued to parents permitting their children to attend school who had been kept out on account of contagious diseases,	50

Deaths.

Number of deaths reported in the borough,	170
Number of deaths reported over 80 years old,	16
Number of deaths between 70 and 80 years old,	11
Number of deaths caused by gunshot wounds,	4
Number of deaths caused by accident,	18
Number of burial permits granted in Butler borough,	170

Number of dead bodies shipped out of borough,	47
Number of dead bodies buried on poor farm,	9
Number of dead bodies disinterred,	14
Total number of burial permits issued through this office, ...	186

Contagious Diseases.

	Cases.	Deaths.
Diphtheria,	6	1
Scarlet fever,	28	1
Measles,	12	.....
Typhoid fever,	33	3
Tuberculosis, .....	.....	5
Small-pox,	4	.....

Dead horses removed from borough,	25
Dead cows removed from borough,	8

Salary of secretary, \$50.00 per month.

Salary of health officer, \$30.00 per month.

Canton, Bradford County.

Contagious diseases reported. Houses placarded and quarantined.

The sewerage system has been improved by laying 3,120 feet of substantial sewer pipe. An outbreak of scarlet fever necessitated the closing and fumigation of the school building. Registration not enforced excepting that of vaccination of school children.

Salary of secretary, \$2.50 quarterly.

Salary of health officer, \$12.50 quarterly.

Carbondale, Lackawanna County.

Contagious diseases reported. Houses placarded and quarantined.

This board of health has been in an organized condition only since September, 1902.

Partial registration is enforced.

Salary of secretary, \$200.00 per annum.

Salary of health officer, \$600.00 per annum.

Carlisle, Cumberland County.

Death Statistics.

Total number of deaths during year, 133; premature births, 4; average number of deaths for eight years, 163.5; population of Carlisle, not including Dickinson College and Indian School, 9,409; death rate per thousand, 14.1.

Deaths by Months—Carlisle.

	1898.	1899.	1900.	1901.	1902.	Average for five years.
January,	10	18	20	23	11	16.4
February,	8	19	14	15	16	14.4
March,	18	12	28	20	12	17.6
April,	14	13	24	23	8	16.4
May,	17	14	14	18	16	15.8
June,	9	7	12	17	10	11.0
July,	15	9	13	11	5	10.6
August,	16	10	17	16	15	14.8
September,	13	15	14	16	9	13.4
October,	14	19	16	10	14	14.6
November,	20	15	20	7	7	13.8
December,	15	15	16	7	10	13.4

Sex and Color.

	1899.	1900.	1901.	1902.
Males,	99	106	67	63
Females,	69	98	106	62
Number of white persons,	132	181	143	107
Number of colored persons,	37	25	30	23

Age.

	1899.	1900.	1901.	1902.
Above 100,			1	
90 to 100,	4	5	2	1
80 to 90,	12	18	18	16
70 to 80,	29	25	30	19
60 to 70,	23	24	16	16
50 to 60,	13	26	18	16
40 to 50,	11	12	10	9
30 to 40,	7	14	12	9
20 to 30,	9	18	18	7
10 to 20,	8	8	8	6
1 to 10,	24	18	10	9
Under 1,	24	32	28	16
Still born,	5	6	4	9

Causes of Death.

Apoplexy,	7	Bilious fever, collapse,	1
Inanition,	1	Hepatitis, exhaustion,	1
Old age,	3	Asphyxia,	2
Pulmonary tuberculosis,	3	Marasmus,	3
Chronic bronchial catarrh,	3	Gastritis,	1
Paralysis of brain,	2	Paresis,	2
Neurasthenia,	1	Premature birth,	4
Tubercular meningitis,	2	Obstruction of bowels,	1
Valvular disease of heart,	1	General debility,	5
Still born,	6	Invagination of bowels,	1
Tuberculosis of bowels,	1	Congestion of lungs,	1
Consumption,	8	Born dead,	1
Remittent fever,	3	Septic pneumonia,	1
Hemorrhage,	1	Peritonitis,	1
Gastro-enteritis,	1	Arrested circulation in umbilicus,	1
Typhoid fever,	1	Meningitis,	1
Heart disease,	9	Inflammation of brain,	2
Pneumonia,	3	Cancer,	1
Erysipelas,	1	Heart failure,	2
Paralysis of bowels,	1	Enlarged prostate gland,	2
General debility, caused by broken hip,	1	Want of vitality,	1
Diarrhoea,	1	Nephritis,	1
Gastro-hepatic catarrh,	1	Dropsy,	1
Cancer of liver,	1	Bronchitis,	1
Chronic gastric catarrh,	1	Paralysis of heart,	2
Convulsions, found dead in bed,	1	Convulsions, bowel trouble,	1
Hemorrhage of lungs,	1	Carcinoma of uterus,	2
Diphtheria,	2	Chronic diarrhoea,	2
Cholera infantum,	2	Paralysis of throat, want of nourishment,	1
Uraemia,	1	Whooping cough,	1
Catarrh, exhaustion,	1	Disease of liver, kidney and lungs,	1
Cholera morbus,	2	Phthisis,	1
Angina pectoris,	1	Appendicitis, heart failure,	1
Ovarian cyst, exhaustion,	1	Cancer of stomach,	2
Inflammation of bladder,	1	Indigestion, exhaustion,	1

Birth Statistics.

	1898.	1899.	1900.	1901.	1902.	Average for five years.
Males,	86	80	42	61	59	65.6
Females,	59	58	47	53	50	61.2
White,	112	120	101	84	93	102
Colored,	33	18	8	30	16	21

Contagious Diseases—Carlisle.

	Typhoid fever.	Diphtheria.	Measles.	Scarlet fever.
January, .....	.....	.....	.....	.....
February, .....	.....	.....	.....	.....
March, .....	.....	.....	.....	.....
April, .....	.....	.....	1	.....
May,	1	.....	.....	.....
June, .....	.....	.....	.....	.....
July, .....	.....	.....	.....	.....
August, .....	.....	1	.....	.....
September,	1	.....	.....	1
October,	1	2	.....	.....
November,	3	.....	.....	1
December,	1	.....	.....	.....

Salary of secretary, \$12.50 per month.
Salary of health officer, \$25.00 per month.

Carrolltown, Cambria County.

Contagious diseases reported. General registration enforced.
Salary of secretary, \$25.00 per annum.

Catawissa, Columbia County.

Contagious diseases reported. Houses placarded and quarantined. The borough has been improved by adding to the sewerage system, but there is still need for this work to be continued. Registration not enforced.
Salary of secretary, \$25.00 per annum.
Health officer paid for work done.

Clarion, Clarion County.

Diphtheria and scarlet fever are reported and houses placarded and quarantined. The borough is in need of additional sewers. Registration not enforced.
Salary of secretary, \$25.00 per annum.
Health officer paid for serving notices.

Coatesville, Chester County.

Contagious diseases reported. Houses placarded and quarantined. The schools were closed and fumigated in consequence of an epidemic of scarlet fever. The borough authorities took care of 103 cases of small-pox during the year, of which number 68 were outside the borough limits. Registration quite generally enforced.

Salary of secretary, \$75.00 per annum.

Salary of health officer, \$75.00 per annum.

Coudersport, Potter County.

Contagious diseases reported. Houses placarded and quarantined. The condition of the borough has been improved during the year by having houses connected with sanitary sewers and by having many nuisances abated.

Salary of secretary, \$100.00 per annum.

Salary of health officer, \$25.00 per annum.

Crafton, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined. An epidemic of over 100 cases of measles necessitated keeping many children from school, as none were admitted from families who had the disease.

Salary of secretary, \$100.00.

Cresson, Cambria County.

Contagious diseases reported. Houses placarded and quarantined. Whooping cough was very prevalent in the town. Registration is not enforced.

Salary of health officer, \$2.00 for each visit.

Dallastown, York County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced.

Salary of secretary, 50 cents per meeting.

Danville, Montour County.

Contagious diseases not always reported, but when notified of such cases the houses are placarded and quarantined. Registration not enforced, excepting that of vaccination of school children. The sewage system is in need of improvement.

Salary of secretary, \$25.00 per annum.

Salary of health officer, 25 cent per hour when employed.

Dayton, Armstrong County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced.

Salary of secretary, \$10.00 per annum.

Health officer, 25 cents per hour when employed.

Downingtown, Chester County.

Contagious diseases usually reported and houses placarded and quarantined. The borough has been improved during the year by the laying of additional sewers. Two horses died during the year from supposed spinal meningitis, followed by a death in the family from the same cause. Registration only partially enforced.

Salary of secretary, \$30.00 per annum.

Salary of health officer, \$30.00 per annum.

Doylestown, Bucks County.

Contagious diseases reported. Houses placarded and quarantined. Registration partially enforced, and children are not admitted to school unless they can present a physician's certificate of vaccination.

Salary of secretary, \$75.00 per annum.

Salary of health officer, \$100.00 per annum.

DuBois, Clearfield County.

Contagious diseases not always reported, but when notified of such cases the houses are placarded and fumigated. Registration not enforced.

Salary of secretary, \$180.00 per annum.

Salary of health officer, \$100.00 per annum.

Eddystone, Delaware County.

Contagious diseases reported. Houses placarded and quarantined.
Registration only partially enforced, including that of vaccination
of school children.
Salary of secretary, \$25.00 per annum.
Salary of health officer, \$25.00 per annum.

Edenburg, Clarion County.

Contagious diseases reported. Houses placarded and quarantined.
General registration enforced.
Salary of secretary, \$1.00 per month.

Edgewood, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined.

Contagious Diseases.	Males.	Females	Color.	Deaths.	March.	May.	June.	December.	Agcs.	October.
Diphtheria, .....	.....	1	White, .....	.....	.....	.....	.....	1	.....	9
Scarlet fever,	2	3	White, .....	.....	1	1	2	1	.....	3 to 20
Measles,	2	1	White, .....	.....	3	.....	.....	.....	.....	9 to 12
Typhoid fever,	1	1	White, ...	2	1	1	.....	.....	.....	11 and 41

Three marriages were reported during the year.
The following is a list of births reported during the year:

Males.	Females.	Total.	January.	February.	April.	August.	September.	October.
5	3	8	3	1	1	1	1	1

Parents all born in United States.

There were 15 deaths, as follows:

Cause of Death.	Number.	Month.	Age.	Sex.	Color.	Length of sickness.
Rupture of foramen ovale,	1	January, ...	1 day,	Male,.....	White,...	1 day.
Pneumonia,	1	January, ...	74	Female,	White,...	9 days.
Paralysis,	1	January,	66	Female,	White,...	3 months.
La grippe,	1	February, ...	54	Male,.....	White,...	
Peritonitis,	1	March,	11	Female,	White,...	3 weeks.
Typhoid pneumonia,	1	April,	41	Male,.....	White,...	3 weeks.
Apoplexy-paralysis,	1	April,	55	Male,.....	White,...	
Marasmus,	1	May,	14 days,	Female,	White,...	14 days.
Typhoid fever,	1	May,	11	Female,	White,...	3 weeks.
Asphyxia,	1	June,	1 day,	Male,.....	White,...	
Mitral Insufficiency,	1	June,	19	Female,	White,...	3 years.
Heart disease,	1	July,	65	Female,	White,...	Suddenly.
Cerebral apoplexy asthenia, ..	1	September,	77	Female,	White,...	7 years.
Apoplexy,	1	October,	44	Female,	White,...	Suddenly.
Cholera infantum,	1	October,	1	Female,	White,...	10 days.

Salary of secretary, \$60.00 per annum.

Health officer paid for work done.

Emlenton, Venango County.

Contagious diseases reported. Houses placarded and quarantined. The borough has put in a sewerage system during the year and has had the reservoir and pipes thoroughly cleaned on account of an epidemic of typhoid fever.

Emsworth, Allegheny County.

Scarlet fever, 12 cases, 1 death; diphtheria, 1 case; deaths from all causes, 7.

Ephrata, Lancaster County.

Contagious diseases reported. Houses placarded. Much need is felt of a sewerage system. Registration of births and of vaccination of school children enforced.

Salary of secretary, \$20.00 per annum.

Salary of health officer, \$35.00 per annum.

Erie, Erie County.

Communicable Diseases.

One hundred and twelve cases of scarlet fever, with no deaths, show that while that disease was greatly prevalent, yet the type was very mild.

Sixty-one cases of diphtheria, with 19 deaths, indicate a most severe form of that affection. Of these cases the greater portion were laryngeal, with poor sanitary surroundings, and in several instances no physician was called until the patient was moribund.

One hundred and eighty-nine cases of typhoid fever, with 13 deaths, while showing a low percentage of fatalities, also indicates that the repeated protests of this department against the further pollution of the source of the city's water supply by the continued emptying of sewage into the bay, has not been heeded by those persons having this most important matter in charge.

Tuberculosis in various forms claimed 70 victims during the year; of this number, 61 were of the pulmonary type. Thirteen deaths occurred from septic infections, of which nine were puerperal, nearly all of which were at the hands of uneducated midwives, and could have been prevented by a law properly regulating the practice of this important branch of medicine. Tetanus, syphilis, whooping cough and epidemic cerebro-spinal meningitis each claimed one victim.

Small-pox has been present in the city most of the time since April 16, on which date a number of cases were located on the east side, in the First and Second wards.

Births.

The number of births reported during the year just ended was 1,131, a decrease of 70 as compared with 1901. It is, therefore, evident that a considerable percentage of these cases are not referred to this Department for registration.

Deaths.

Seven hundred and sixty-eight deaths occurred during the year just ended, giving a mortality rate, based on an estimated population of 56,000, of 13.67 per 1,000 inhabitants. This shows a gratifying decrease when compared with 1901, the number of deaths for that year being 800, with a death rate per 1,000 of 14.67.

The principal causes of death were tuberculosis, 70; pneumonia, 65; cancer and tumor, 30; hepatic cirrhosis, 24; meningitis, 23; apoplexy, 50; heart disease, 63; infantile diarrhoeas, 45; nephritis, 37; marasmus, premature, etc., 67; senility, 39, and the various acci-

dents, 40. The ages at which the greatest number of deaths occurred were 160 deaths of children under 1 year, and 168 of persons of 70 years and over.

Food Supplies.

Fourteen hundred and forty-six samples of milk have been tested for fats, etc., and were generally found to comply with the required regulations.

The sanitary condition of 154 dairies have been investigated and show a commendable improvement over previous years.

Nuisances.

The sanitary police have made 12,578 inspections, resulting in the finding of 3,184 nuisances, all of which, with a few exceptions, have been abated in a satisfactory manner. This does not include about 2,000 loads of rubbish, the disposal of which was conducted under the direct supervision of one of the department employes.

In addition to this work, 208 houses were quarantined for contagious diseases, and later disinfected, several school houses, hotels and other public buildings suspected of harboring contagion, were also fumigated.

Deaths by Months and Years from 1876 to 1902, Inclusive.

Year.	Total.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1876,	303	29	23	15	20	28	22	24	40	26	32	19	25
1877,	316	26	25	35	28	23	19	27	36	28	19	20	23
1878,	336	22	25	38	29	30	29	22	30	30	25	34	22
1879,	359	29	32	25	22	24	19	34	56	30	27	21	30
1880,	454	38	35	55	53	50	16	33	42	40	29	33	25
1881,	549	31	40	53	41	33	27	63	73	50	42	36	60
1882,	496	57	41	34	35	48	38	39	50	51	42	29	32
1883,	439	36	31	41	32	43	31	45	45	31	33	34	37
1884,	493	48	37	39	34	36	32	37	64	48	37	51	30
1885,	456	28	21	53	53	48	21	43	66	29	32	21	31
1886,	566	41	44	40	51	52	32	50	54	33	62	48	59
1887,	612	56	53	62	45	43	47	67	78	40	43	41	37
1888,	566	64	41	44	62	41	40	62	54	44	34	42	38
1889,	541	46	43	49	37	38	34	36	51	45	52	40	61
1890,	711	73	57	49	62	65	58	61	77	65	38	54	51
1891,	783	51	60	60	81	75	55	53	74	55	67	73	79
1892,	874	103	76	89	80	76	83	69	65	69	57	48	59
1893,	773	73	48	68	53	58	49	65	86	66	63	61	83
1894,	803	97	82	60	58	82	87	73	62	45	42	53	62
1895,	763	77	81	70	70	71	62	63	59	49	59	50	59
1896,	643	50	36	39	61	66	45	59	61	57	55	62	52
1897,	640	48	51	67	53	60	41	61	70	46	48	57	38
1898,	654	55	56	60	56	49	37	53	56	56	42	57	77
1899,	720	88	66	75	63	50	51	41	52	66	43	61	65
1900,	761	54	54	68	73	69	57	59	71	70	61	54	74
1901,	800	68	61	97	98	85	80	58	71	65	34	43	54
1902,	766	66	70	60	77	72	56	57	66	67	55	59	61

Deaths by Ages and Sex from 1876 to 1902, Inclusive.

Year.	Total.	Under 1 year.	1-5.	5-10.	10-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70 and over.	Males.	Females.
1876,	303	87	52	12	14	30	29	13	14	23	29	167	136
1877,	316	99	35	9	17	24	27	16	28	29	32	152	164
1878,	336	84	35	17	21	34	19	36	24	30	36	177	159
1879,	359	108	55	12	15	28	28	15	27	31	40	186	173
1880,	454	117	75	19	35	36	31	32	29	31	49	244	210
1881,	549	147	92	40	24	60	33	24	39	34	56	308	241
1882,	496	110	74	37	38	47	37	36	34	35	48	250	246
1883,	436	124	45	15	27	50	39	28	28	33	50	235	204
1884,	493	133	62	21	28	43	25	20	36	36	69	256	237
1885,	456	140	47	9	21	42	25	37	40	42	53	239	217
1886,	556	134	96	32	33	38	42	36	47	41	67	298	258
1887,	612	178	83	20	26	59	52	34	35	53	72	315	297
1888,	566	148	67	18	28	46	35	33	61	56	74	291	275
1889,	641	146	50	17	34	57	35	37	39	60	66	293	243
1890,	711	130	87	38	27	68	78	51	44	60	78	386	325
1891,	783	152	100	46	55	60	56	48	69	77	120	437	346
1892,	874	168	157	118	55	70	57	39	50	71	89	457	417
1893,	773	175	116	54	36	64	52	50	60	77	89	441	332
1894,	803	187	149	66	52	61	53	38	48	50	99	443	360
1895,	763	195	35	30	29	60	65	56	53	71	116	396	367
1896,	643	143	63	20	29	73	44	40	57	75	93	359	284
1897,	640	129	51	13	33	54	52	55	62	78	113	359	281
1898,	654	146	49	24	32	56	47	50	60	75	115	346	308
1899,	730	143	49	30	29	57	70	64	72	68	148	385	145
1900,	764	181	76	19	30	64	54	66	58	95	121	439	325
1901,	800	173	96	28	23	48	51	62	83	94	135	438	362
1902,	766	165	52	17	22	65	54	61	58	94	168	477	289

Report of Communicable Diseases in Erie for the Year 1902, by Months.

Months.	Diphtheria.		Scarlet Fever.		Small-Pox.		Measles.		Pertussis.		Typhoid Fever.		Tuberculosis.		Epidemic cerebro spinal meningitis.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January,	8	5	9	.....	.....	.....	.....	.....	.....	.....	59	4	.....	.....	.....	.....
February,	2	1	6	.....	.....	.....	.....	.....	.....	.....	46	1	.....	.....	.....	.....
March,	8	2	3	.....	.....	.....	.....	.....	.....	.....	17	1	.....	.....	.....	.....
April,	8	3	4	.....	.....	.....	.....	.....	.....	.....	8	1	.....	.....	.....	.....
May,	6	2	2	.....	15	.....	.....	.....	.....	.....	6	2	.....	.....	.....	.....
June,	6	2	11	.....	23	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
July,	7	1	3	.....	3	.....	.....	.....	.....	.....	6	1	.....	.....	.....	.....
August,	2	.....	8	.....	7	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....
September,	4	2	15	.....	12	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....
October, .....	.....	.....	20	.....	1	.....	.....	.....	.....	.....	10	1	.....	.....	.....	.....
November,	2	1	15	.....	12	.....	.....	.....	.....	.....	8	1	.....	.....	.....	.....
December,	8	.....	16	.....	44	.....	.....	.....	.....	.....	4	1	.....	.....	.....	.....
.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Total, 1902,	61	19	112	.....	134	.....	.....	.....	.....	.....	189	13	.....	.....	.....	.....
.....
Total, 1901,	80	9	93	.....	25	.....	.....	.....	.....	.....	80	8	.....	.....	.....	.....

*Not recorded.

Deaths in Erie from the Principal Communicable Diseases from 1876
to 1902, Inclusive.

Year.	Diphtheria.	Scarlet fever.	Small-pox.	Measles.	Pertussis.	Typhoid fever.	Tuberculosis.	Epidemic cerebro spinal meningitis.
1876,	6	4			18	16	49	4
1877,	4	5			1	11	53	
1878,	12	10		1	4	6	60	
1879,	12	8		7	9	9	55	
1880,	46	11			7	7	58	
1881,	58	2			6	17	60	
1882,	56		12	9	7	25	53	
1883,	15	10		5	7	9	49	
1884,	36	13		1	2	12	62	
1885,	10	3			13	16	65	
1886,	8	49		13	1	15	54	
1887,	12	24		11	1	13	63	
1888,	12	3		8	3	16	58	
1889,	16	3		1	15	20	60	
1890,	16	10		9	2	27	91	
1891,	61	14		2	2	37	66	
1892,	224	2		1	2	24	83	
1893,	35	7		1		17	59	
1894,	64	61		18		9	55	
1895,	25	12		2	23	21	62	
1896,	10	2		4	2	19	64	
1897,	4	2		3	1	12	68	1
1898,	14	3			2	7	57	
1899,	16	9		1	3	18	80	3
1900,	32	1	1		1	18	64	
1901,	9	3		40	19	8	69	
1902,	19				1	13	70	1

Deaths for 1902 by Age and Sex, Erie.

Cause of Death.	Age by Years.											
	Totals.	Under 1 year.	to 5.	to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 and over.	Male. Female.
I. General Diseases.												
1. Typhoid fever, abdominal typhus,	13	1	5	3	2	2					9	4
2. Exanthematous typhus,												
3. Recurrent Fever,												
4. Intermittent fever and malarial cachexia,												
4a. Malarial cachexia,												
5. Variola,												
6. Measles,												
7. Scarlatina,												
8. Whooping cough,	1	1									1	
9. Diphtheria and croup,	19	13	6								12	7
9a. Diphtheria,												
10. Grippe,												
11. Sweating or military fever,												
12. Asiatic cholera,												
13. Cholera nostras,												
14. Dysentery,	3	1			1					1	2	1
14a. Epidemic dysentery,												
15. Pest (plague or bubonic plague),												
16. Yellow fever,												
17. Leprosy,												
18. Erysipelas,												
19. Other epidemic affections,												
20. Purulent and septicaemic infection, .	4		1	1	2						3	1
21. Glanders and farcy,												
22. Malignant and pustule charon (anthrax),												
23. Rabies,												
24. Actinomycosis,												
25. Pellagra,												
26. Tubercle of the larynx,	1									1	1	
27. Tubercle of the lungs,	61	1	2	7	18	9	7	6	6	5	33	28
28. Tubercle of the meninges,	4	1	2	1							2	2
29. Abdominal tubercle,	3		1	1		1					3	
30. Pott's disease,												
31. Cold abscess and abscess by congestion,												
32. White swelling,												
33. Other tuberculous affections,	1									1	1	
34. Generalized tuberculosis,												
35. Scrofula,												
36. Syphilis,	1			1							1	
36a. Soft chancre,												
37. Blennorrhagia of the adult,												
38. Gonorrhoeal affections of the child, ..												
39. Cancer and other malignant tumors of the buccal cavity,												
40. Cancer and other malignant tumors of the stomach and liver,	11				2	3	4	2	4	7		
41. Cancer and other malignant tumors of the peritoneum, intestines and rectum,	6				2	3		1	2	4		
42. Cancer and other malignant tumors of the female genital organs,	4				1	1	1		1		4	
43. Cancer and other malignant tumors of the breast,	2								2	2		
44. Cancer and other malignant tumors of the skin,	3					1		1	1	3		

Deaths for 1902 by Age and Sex, Erie—Continued.

[illegible]

Deaths for 1902 by Age and Sex, Erie—Continued.

Cause of Death.	Age by Years.										Male.	Female.
	Totals.	Under 1 year.	1 to 5.	to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 and over.	
126. Nonvenereal diseases of the genital organs of the male,												
127. Metritis,												
128. Uterine hemorrhage, none-puerperal,												
129. Uterine tumor (not cancerous),												
130. Other diseases of the uterus,												
131. Cysts and other tumors of the ovary,												
132. Other diseases of the genital organs of the female,	1					1						1
133. Non-puerperal diseases of the breast (cancer excepted),												
VII. The Puerperal State.												
134. Accidents of pregnancy,	3				1	1	1					3
134a. Labor, normal,												
135. Puerperal hemorrhage,	1							1				1
136. Other accidents of labor,												
137. Puerperal septicaemia,	9				7	2						9
138. Albuminuria and puerperal eclampsia,	2					2						2
139. Phlegmasia alba dolens, puerperal,												
140. Other puerperal accidents, sudden deaths,												
141. Puerperal diseases of the breast,												
VIII. Diseases of the Skin and Cellular Tissue.												
142. Gangrene,	4										4	3
143. Furuncle (carbuncle),	1										1	1
144. Phlegmon, warm abscess,	1	1										1
145. Tinea favus,												
145a. Tinea tonsurans, trichophyten,												
145b. Pelades,												
145c. Itch,												
145d. Other diseases of the Skin and its adnexa,	1							1				1
IX. Diseases of the Organs of Locomotion.												
146. Affections of the bones (non-tuberculosis),	1					1						1
147. Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted),												
148. Amputation,												
149. Other affections of the organs of locomotion,												
X. Malformation.												
150. Malformation (still births not included),	1	1										1
XI. Early Infancy.												
150a. The newborn and nurslings departing from hospitals without having been sick,												
151. Congenital debility, letorus and sclerema,	2	20									13	7
152. Other diseases of early infancy,	2	2									1	1
153. La L. of Care	61	37	3						1		24	17

Deaths for 1902 by Age and Sex, Erie—Continued.

Cause of Death.	Age by Years.											Male.	Female.	
	Totals.	Under 1 year.	1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 and over.			
XII. Old Age.														
154. Senile debility,	39											39	18	21
XIII. Affections Produced by External Causes.														
155. Suicide by poison,														
156. Suicide by asphyxia,														
157. Suicide by hanging or strangulation,														
158. Suicide by drowning,														
159. Suicide by firearms,														
160. Suicide by cutting instruments,	1					1						1		
161. Suicide by jumping from high places,														
162. Suicide by crushing,														
163. Other suicides,														
164. Fractures,	7					2	3	1				1	7	
165. Sprains,														
165a. Luxations,														
166. Other accidental traumatisms,	20			1	1	6	5	2	2	1	2	16	4	
167. Burns and scalds,	4		2							1	1	1	3	
168. Burns from corrosive substances,														
169. Isolation,														
170. Freezing,														
171. Electrical disturbances,														
172. Accidental submersion,	3				3							3		
173. Prostration,														
173a. Inanition,														
174. Absorption of deleterious gases (sul- cide excepted),	6		2	1		1					2	3	3	
175. Other acute poisonings,														
176. Other external violence,														
XIV. Ill-Defined Diseases.														
177. Dropsy,	1										1		1	
178. Sudden death,														
179. Ill-defined or unspecified causes of death,	1										1	1		
Totals,	766	165	52	17	32	65	54	61	58	94	168	437	329	

Report of Births for the Year 1902, Erie.

	Births by Sex.		Viable.		Non-viable.		Attendant.		Total number of births.
	Male.	Female.	Male.	Female.	Male.	Female.	Physician.	Midwife.	
January,	40	48	39	47	1	1	58	30	88
February,	54	41	52	40	2	1	57	33	95
March,	67	34	63	33	4	1	68	33	101
April,	44	43	39	46	5	2	56	36	92
May,	47	43	46	42	1	1	63	27	90
June,	49	55	48	52	1	3	64	40	104
July,	43	50	44	48	4	2	63	35	98
August,	77	48	72	46	5	2	83	42	125
September,	57	45	55	43	2	2	65	37	102
October,	36	42	35	41	1	1	48	30	78
November,	46	38	43	35	3	3	63	21	84
December,	44	30	42	29	2	1	57	17	74
Totals, 1902,	609	522	578	502	31	20	745	386	1,131
Totals, 1901,	639	565	609	538	30	27	850	354	1,204

Salary of secretary, \$750.00 per annum.

Salary of health officer, \$1,200.00 per annum.

Factoryville, Wyoming County.

Contagious diseases reported. Houses placarded and quarantined. Registration of births and still births enforced. Most of the school children have been vaccinated but registration of vaccination is not enforced.

Deaths.

Consumption,	1
Disease of the kidney,	1
Cancer of the womb,	1
Paralysis,	3
Peritonitis,	1
Old age,	2
Suicide,	2
Total,	11

Salary of secretary, \$5.00 per annum.

Health officer paid for work done.

Farmington, Clarion County.

This board organized in June and adopted the by-laws sent by the State Board of Health. The district was visited by an epidemic of 40 cases of small-pox from which, however, no deaths resulted. Registration of school children is enforced.

Salary of sanitary agent, \$15.00.

Fleetwood, Berks County.

The borough has been free from contagious diseases, excepting two mild cases of diphtheria. Registration is not enforced, excepting that of vaccination of school children.

Salary of secretary, \$3.50.

Salary of health officer, \$2.00.

Forest City, Susquehanna County.

Contagious diseases reported. Houses placarded and quarantined and in cases of small-pox a guard placed. Registration not enforced, excepting that of vaccination of school children.

Salary of secretary, \$50.00 per annum.

Sanitary officer, 20 cents per hour for actual work.

Fountain Hill, Lehigh County.

Contagious diseases reported. Houses placarded and quarantined. The milk supply has been thoroughly inspected by the health officer, with the effect of a noticeable improvement. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$30.00 per annum.

Salary of health officer, \$120.00 per annum.

Frackville, Schuylkill County.

Contagious diseases reported. Houses placarded and quarantined.

Salary of secretary, \$4.16 per month.

Salary of health officer, \$4.16 per month.

Freeport, Armstrong County.

Contagious diseases reported. Houses placarded and quarantined. Measles and whooping cough have both been epidemic in the borough, but few deaths resulted. General registration is enforced.

Salary of secretary, \$50.00 per annum.

Gettysburg, Adams County.

Contagious diseases reported. Houses placarded and quarantined and school attendance prohibited. Typhoid fever prevailed to an unusual extent during the year, but only two deaths resulted. Registration not enforced.

Salary of secretary, \$60.00 per annum.

Salary of health officer, \$60.00 per annum.

Greensburg, Westmoreland County.

Communicable Diseases Compared with Other Years.

	1902.	1901.	1900.	1899.	1898.	1897.	1896.	1895.
Typhoid fever,	25	25	18	25	18	36	23	26
Diphtheria,	7	24	44	27	7	25	5	4
Scarlet fever,	35	11	37	5	1	.....	1	25
Measles,	6	8	74	3	20	2	2	54
Whooping cough, .....	.....	.....	.....	1	6	6	3	2
Membranous croup, .....	.....	.....	.....	.....	.....	.....	3	.....
Tuberculosis,	7	1	1	.....	1	.....	1	.....
Mumps, .....	.....	.....	.....	.....	1	.....	1	.....
Small-pox,	47	.....	1	1	.....	.....	.....	.....
Variceloid,	1	.....	1	.....	.....	.....	.....	.....
Total,	121	69	176	62	54	71	44	111

Total number of deaths from all causes in 1902, 92.

Deaths from Communicable Diseases.

	1902.	1901.	1900.	1899.	1898.	1897.	1896.	1895.
Typhoid fever,	3	5	1	1	1	4	5	4
Diphtheria,	1	1	7	3	.....	3	2	.....
Scarlet fever,	1	.....	1	.....	.....	.....	.....	2
Measles,	1	.....	.....	.....	.....	.....	.....	3
Tuberculosis,	7	1	5	9	1	4	4	7
Whooping cough,	1	2	.....	1	1	.....	.....	.....
Total,	14	9	14	14	3	11	11	16

Greenwood, Crawford County.

Contagious diseases reported. Houses placarded and quarantined. Quarantine rules for small-pox were adopted by the board, incident to an epidemic of 22 cases, which also necessitated closing the schools for several weeks.

Salary of secretary, \$31.00 per annum.

Salary of health officer, \$50.00 per annum.

Hallstead, Susquehanna County.

Contagious diseases not always reported, but whenever possible houses are placarded and quarantined and school attendance prohibited. Whooping cough has been unusually prevalent.

Salary of secretary, \$25.00.

Health officer paid \$80.00 for small-pox cases.

Hatboro, Montgomery County.

Contagious diseases reported. Houses placarded. General registration enforced.

Salary of secretary, \$40.00 per annum.

Honeybrook, Chester County.

Contagious diseases reported. Houses placarded and quarantined. Two cases of small-pox occurred, one of them in the person of a scholar of the public school. In consequence, the school was closed for two weeks and thoroughly fumigated. Registration not enforced, excepting that of vaccination of school children.

Salary of secretary, \$10.00.

Indiana, Indiana County.

Contagious diseases reported. Houses placarded and quarantined. A mild epidemic of scarlet fever resulted in the death of one child. A sewerage system is being built. Only partial registration enforced.

Salary of secretary, \$120.00 per annum.

Salary of health officer, \$120.00 per annum.

Jamestown, Mercer County.

Contagious diseases not always reported. Houses placarded and quarantined. Registration not enforced.

Salary of secretary, \$5.00 per month.

Jeddo, Luzerne County.

Contagious diseases reported. Houses placarded and quarantined. General registration enforced.

No salaries.

Johnsonburg, Elk County.

Contagious diseases reported. Houses placarded. The borough is in need of more sewers and better arrangements for the disposal of garbage. General registration enforced.

Salary of secretary, \$60.00 per annum.

Salary of health officer, \$75.00 per annum.

Johnstown, Cambria County.

The board has adhered to its rules on vaccination and those requiring the successful vaccination of all pupils attending the public schools have been enforced.

Owing to the seriousness of the epidemic of small-pox prevailing during the year 1902 and the unfavorable location and inadequate accommodations afforded the many patients at the lazaretto, the board then in existence earnestly recommended councils to provide for the erection of a municipal hospital at the earliest convenience. Councils subsequently passed an ordinance providing for a loan of \$10,000 to be applied to the erection, completion and furnishing of a municipal hospital for contagious diseases, which was approved by his honor, Mayor Pendry, December 17, 1902. The new hospital being completed and ready for occupancy the 14th day of November, the lazaretto, by order of the board, was destroyed by fire on the evening of November 15, 1902. The total number of small-pox patients admitted during the year for treatment is as follows: Lazaretto, 77; municipal hospital, 39. Deaths: Lazaretto, 6; municipal hospital, 7.

Births, 1902—Johnstown.

During the year there were 935 births reported to the board; 480 were males and 455 were females.

Deaths in 1902—Johnstown.

During the year 1902 there were 720 deaths reported. Of the deaths occurring during the year 398 were males, 319 were females; 714 were white, 6 were colored; 427 were single, 206 were married; 31 were widows, 26 were widowers; not stated, 30.

The following mortuary report gives the deaths by months occurring during the year:

January,	41	November,	37
February,	50	December,	30
March,	57		
April,	63	Total,	595
May,	54	Deaths in Memorial Hospital for 1902,	93
June,	44	Deaths in Cambria Hospital for 1902,	19
July,	62	Deaths in Municipal Hospital for 1902,	7
August,	56	Deaths in Lazaretto for 1902,	6
September,	53		
October,	48	Total,	720

Ages and Nativity.

The following table shows the ages and nativity of those who have died during the year:

Ages.		Nativity.	
Under one year,	176	Johnstown,	422
From 1 to 2 years,	40	Other parts United States,	101
From 2 to 5 years,	52	England,	8
		Ireland,	26
Total under 5 years,	268	Scotland,	3
From 5 to 10 years,	35	Wales,	10
From 10 to 20 years,	49	Canada,	2
From 20 to 30 years,	100	Germany,	41
From 30 to 40 years,	72	Italy,	19
From 40 to 50 years,	44	Russia,	1
From 50 to 60 years,	35	Poland,	4
From 60 to 70 years,	47	Austria,	3
From 70 to 80 years,	50	Hungary,	54
From 80 to 90 years,	13	Sweden,	2
From 90 to 100 years,	3	Greece,	10
Not stated,	4	Not given,	14
Total,	720	Total,	720

Causes of Death.

Mortuary report for 1902.

Causes.	No.	Causes.	No.
Measles,	2	Exhaustion,	1
Diphtheria,	15	Premature births,	6
Membranous croup,	5	Still births,	37
Scarlet fever,	43	Abscess of liver,	1
Typhoid fever,	14	Cirrhosis of liver,	3
Small-pox,	24	Cholera infantum,	22
Septicæmia,	12	Jaundice,	1
Parotitis,	3	Obstruction of intestines,	2
Tuberculosis, pulmonary,	6	Pneumonia,	34
Tubercular meningitis,	2	Bronchitis,	2
Cancer,	10	Asthma,	5
Dropsy,	6	Cramp,	3
Marasmus,	4	Hemorrhage of bowels,	5
Rheumatism,	2	Catarrhal fever,	4
Otitis,	1	Neuralgia,	1
Gastritis,	7	Endocarditis,	2
Enteritis,	5	Pericarditis,	1
Enterocolitis,	3	Uremia,	13
Gastroenteritis,	6	Embolism,	1
Peritonitis,	3	Cyanosis of spine,	1
Inanition,	40	Angina pectoris,	2
Appendicitis,	7	Heart disease,	31
Congestion of brain,	3	Catarrh,	2
Softening of brain,	4	Meningitis,	16
Paralysis,	11	Apoplexy,	14
Epilepsy,	1	Stomach trouble,	1
Cerebral tumor,	1	Accidental,	22
Tetanus,	1	Eclampsia,	2
Convulsions,	19	Spasms,	7
Spina bifida,	1	La grippe,	2
Bright's disease,	9	Knife wound,	1
Nephritis,	4	Blood poisoning,	2
Diabetes,	4	Fracture of skull,	5
Cystitis,	1	Burns,	4
Cramps,	1	Railroad injuries,	46
Gangrene,	1	Gunshot injuries,	1
Tumor,	1	Asphyxia,	1
Abscess of brain,	2	Suicide,	1
General debility,	17	Drowning,	2
Infantile debility,	1	Unknown causes,	4
Old age,	12		
		Total,	720

Contagious Diseases—Johnstown.

There were 710 cases of infectious and contagious diseases reported to the board during the year. The following statement shows the number of cases reported each month:

Months.	Diphtheria.	Diphtheritis croup.	Membranous croup.	Measles.	Scarlet fever.	Small-pox.	Spinal meningitis.	Typhoid fever.	Totals.
January,	3	2	2	.....	55	.....	.....	10	73
February,	4	1	5	.....	67	.....	.....	4	81
March,	6	2	1	.....	102	1	.....	5	118
April,	4	1	.....	2	88	1	.....	3	98
May,	3	1	1	5	43	6	.....	7	60
June,	9	2	3	9	25	19	.....	4	64
July,	3	.....	2	4	8	23	1	6	27
August,	3	3	.....	3	5	24	2	5	23
September,	8	2	3	2	6	53	.....	7	36
October,	9	.....	.....	1	3	30	4	30	52
November,	9	3	1	.....	4	20	.....	25	44
December,	17	.....	2	.....	8	23	.....	18	47
Totals,	78	17	20	26	414	200	7	124	710

Nuisances.

There were 608 nuisances abated and 696 houses fumigated during the year.

Salary of secretary, \$250.00 per annum.

Salary of health officer, \$900.00 per annum.

Kane, McKean County.

Contagious diseases generally reported. Houses placarded and quarantined. Scarlet fever and diphtheria have prevailed in the borough to an unusual extent, but only three deaths have resulted from these diseases. Several new sewers have been laid during the year. Registration not enforced.

Salary of secretary, \$40.00 per annum.

Kennett Square, Chester County.

There were eight nuisances reported and seven abated.

Contagious diseases—one case of measles and considerable whoop-

ing cough not reported. There were also about a dozen cases of typhoid fever, mostly believed to have been imported. There were no deaths therefrom.

During the year there were 14 deaths; males, 6, females, 8; white, 10; colored, 4. Population, 1,500; death rate, 1 per cent.

A sewage system is much needed, and some more general and effective system of inspection of plumbing.

Kingston, Luzerne County.

Contagious diseases reported. Houses placarded and quarantined and, in cases of small-pox, guarded. Several new sewers have been laid during the year. Registration of undertakers and of vaccination of school children enforced.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$25.00 per annum.

Kinzua, Warren County.

No board of health has yet been organized in this village, and contagious diseases are not regularly reported. Measles and typhoid fever have been quite prevalent and there have been a number of cases of pneumonia.

No salaries.

Kipple, Blair County.

Contagious diseases reported. Houses placarded and quarantined. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$120.00 per annum.

Kittanning, Armstrong County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced, excepting vaccination of school children.

Salary of secretary, \$60.00 per annum.

Salary of health officer, \$60.00 per annum.

Knoxville, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined and in cases of small-pox guarded. Whooping cough and measles have been unusually prevalent. Several new sewers have been laid. Registration of births, still births and vaccination of school children enforced.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$5.00 per month and \$2.50 per day when on special quarantine.

Lancaster, Lancaster County.

Three cases of small-pox were reported, and the disease fortunately arrested and confined to the premises where the cases had all originated. As the first case was promptly diagnosed and reported before any opportunity for spread of the diseases, the board was enabled, by strict and rigid quarantining, to confine the outbreak to the infected premises.

Three hundred and eighty-eight nuisances have been reported and removed during the year.

Diphtheria and Membranous Croup, Giving Cases and Mortality, Monthly—Lancaster.

Months.	Total cases.	Total deaths.	Cases.		Deaths.		Color.	
			Males.	Females.	Males.	Females.	White.	Colored.
January,	3		2	1			3	
February,								
March,	3			3			3	
April,	3		1	2			3	
May,								
June,	4		2	2			4	
July,								
August,	3		2	1			3	
September,	10	2	5	5	1	1	10	
October,	7		6	1			7	
November,	11	1	4	7	1		10	1
December,	8	1	3	5		1	8	
Total cases,	52		25	27			51	1
Total deaths,		4			2	2		

Death rate, 7.69.

Scarlet Fever, Monthly—Lancaster.

Months.	Total cases.	Total deaths	Cases.		Deaths.		Color.	
			Males.	Females.	Males.	Females.	White.	Colored.
January,	17	.....	9	8	.....	.....	17	.....
February,	4	.....	2	2	.....	.....	4	.....
March,	3	.....	1	2	.....	.....	2	1
April,	2	.....	2	.....	.....	.....	2	.....
May,	9	.....	3	6	.....	.....	9	.....
June,	1	.....	1	.....	.....	.....	1	.....
July,	1	.....	1	.....	.....	.....	1	.....
August, .....	.....	.....	.....	.....	.....	.....	.....	.....
September,	2	.....	1	1	.....	.....	2	.....
October,	2	.....	.....	.....	.....	.....	2	.....
November,	13	.....	8	5	.....	.....	13	.....
December,	10	.....	3	7	.....	.....	10	.....
Total cases,	64	.....	31	33	.....	.....	63	1
Total deaths, .....	.....	.....	.....	.....	.....	.....	.....	.....

Typhoid Fever, Monthly—Lancaster.

Months.	Total cases.	Total deaths	Cases.		Deaths.		Color.	
			Males.	Females.	Males.	Females.	White.	Colored.
January,	18	4	9	9	3	1	18	.....
February,	32	1	12	20	1	.....	32	.....
March,	16	.....	7	9	.....	.....	16	.....
April,	16	3	7	9	1	2	16	.....
May,	10	.....	3	7	.....	.....	10	.....
June,	7	1	4	3	1	.....	7	.....
July,	16	.....	9	7	.....	.....	16	.....
August,	29	5	5	15	1	4	20	.....
September,	15	2	9	6	1	1	15	.....
October,	11	1	7	4	1	.....	11	.....
November,	25	3	18	7	3	.....	24	1
December,	9	1	4	5	1	.....	9	.....
Total cases,	195	.....	94	101	.....	.....	.....	.....
Total deaths, .....	.....	21	.....	.....	13	8	194	1

Death rate, 10.76.

Monthly Mortality, Males and Females—Lancaster.

Months.	Males.	Females.	White.	Colored.	Total Males and Females.			
					1902.	1901.	1900.	1899.
January,	19	35	52	2	54	45	61	73
February,	18	18	34	2	36	66	65	76
March,	36	21	54	3	57	85	54	74
April,	25	28	51	2	53	62	71	119
May,	28	15	41	2	43	58	56	69
June,	29	14	41	2	43	39	42	47
July,	37	23	59	1	60	50	89	57
August,	27	20	46	1	47	60	37	58
September,	17	24	41	.....	41	51	47	40
October,	28	13	41	.....	41	56	44	23
November,	28	23	49	2	51	34	43	50
December,	21	30	51	1	51	45	54	54
Totals,	313	264	559	18	577	651	661	750
Males and females,	577		577					

Total death rate, including suicides and accidents, 13.90.

Typhoid Fever, Covering a Period of Seven Consecutive Years, Giving Total Cases and Mortality—Lancaster.

Year.	Janu-ary.		Feb-ruary.		March.		April.		May.		June.		July.		August.		Septem-ber.		Octo-ber.		Novem-ber.		Decem-ber.		Total deaths.		Death rate.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Total cases.	Total deaths.		
	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)	(Cases.)	(Deaths.)				
1886.	1	...	3	2	5	1	7	...	4	1	4	...	3	...	5	...	4	...	4	...	8	1	21	...	70	7	10.00	...
1887.	4	2	1	120	19	21	9	7	...	9	1	7	2	...	16	...	26	4	13	1	6	1	8	1	212	41	19.34	...
1888.	11	2	9	3	8	2	8	1	3	2	37	5	8	2	9	...	21	2	14	2	7	2	1	1	140	25	17.80	...
1889.	19	2	11	2	37	4	31	7	12	...	2	2	17	1	7	...	21	2	14	2	10	3	3	3	184	27	14.67	...
1890.	17	...	11	2	25	...	26	4	12	2	4	1	7	...	3	...	8	...	10	...	5	1	7	2	132	13	8.84	...
1901.	8	1	9	1	...	...	13	1	7	1	2	...	15	2	7	...	8	...	12	2	2	...	6	1	90	9	10.00	...
1902.	18	4	32	1	16	...	16	3	10	...	7	1	16	...	20	...	15	2	1	...	25	3	9	1	136	21	10.76	...
Total cases.	74	75	211	122	27	66	73	68	90	9	71	8	63	10	55	...	1,023	...	...	...	...	...	...	...	143	...	12.97	...
Total deaths.	11	12	26	27	6	10	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	143	...	...	...

Mortality by Age, Sex and Color—Lancaster.

Years.	Death by Age Graded.												Sex and Color.				
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	White.	Colored.	Total.
Below 1 year,	1	7	14	8	2	6	22	18	7	9	4	8	58	48	100	6	106
1 to 5 years,	3	1	4	2	5	2	5	2	2	2	5	1	20	14	33	2	34
5 to 10 years,	1	1	1	1	1	1	1	1	1	1	1	1	3	1	4	1	4
10 to 20 years,	3	2	2	3	1	1	1	3	2	2	3	4	16	10	24	2	26
20 to 30 years,	7	2	4	6	4	7	5	6	2	2	4	2	24	23	45	2	47
30 to 40 years,	4	8	4	2	2	3	3	4	4	2	5	3	35	14	39	3	40
40 to 50 years,	4	4	5	3	2	2	2	3	5	3	2	5	31	13	44	1	44
50 to 60 years,	5	3	7	6	2	5	3	4	1	12	3	10	38	24	61	1	63
60 to 70 years,	14	4	6	7	8	5	10	5	8	5	4	4	29	51	80	1	80
70 to 80 years,	10	2	9	6	13	9	6	3	4	5	8	9	44	40	83	1	84
80 to 90 years,	2	2	5	4	4	4	2	3	1	3	8	3	21	23	43	1	44
92 to 95 years,									1		3	2		6			6
Total deaths,	54	36	57	53	43	43	60	47	41	41	51	51	310	267	559	18	577

Classification, Population, Mortality, Sex and Color—Lancaster.

Population as Per Census of 1900.	Native Born.			Foreign Born.			Native White.			Foreign White.			Colored.		
	Males.			Females.			Total.			Males.			Females.		
	Total.			Total.			Total.			Total.			Total.		
Population,	17,602	29,272	37,967	1,748	1,714	3,462	17,333	19,871	37,194	1,731	1,742	3,474	386	406	792
Total deaths,	266	227	493	417	34	84	364	227	491	47	37	84	14	4	518
Death rate,	15.03	11.18	12.98	26.88	21.21	24.03	16.23	11.42	13.26	27.14	21.23	24.18	36.46	9.00	22.71

Births by Sex and Color—Lancaster.

Months.	Births.				Still Born.						Premature.				
	Males.	Females.	White.	Colored.	Total.	Males.	Females.	White.	Colored.	Total.	Males.	Females.	White.	Colored.	Total.
January.	21	14	35	.....	35	2	4	6	.....	6	3	4	6	.....	6
February.	21	15	35	1	36	.....	3	3	.....	3	.....	2	2	.....	2
March.	25	29	53	1	54	1	1	2	.....	2	1	1	2	.....	2
April.	21	16	37	.....	37	1	1	2	.....	2	1	1	2	.....	2
May.	14	19	33	.....	33	2	3	5	.....	5	2	2	4	.....	4
June.	28	20	46	2	48	3	2	5	.....	5	3	1	4	.....	4
July.	27	17	43	1	44	4	1	5	.....	5	3	1	4	.....	4
August.	14	20	34	.....	34	6	6	12	.....	12	5	5	10	.....	10
September.	19	21	39	1	40	7	3	10	.....	10	6	3	9	.....	9
October.	27	25	51	1	52	2	3	5	.....	5	2	3	5	.....	5
November.	14	22	36	.....	36	2	3	5	.....	5	2	3	5	.....	5
December.	20	19	37	2	39	1	5	6	1	7	1	5	6	1	6
Total.	251	237	479	9	488	32	35	66	1	67	23	31	58	1	59

Lancaster Township, Lancaster County.

Contagious diseases reported. Houses placarded and quarantined and children excluded from schools. Registration of vaccination of school children is enforced. The school board acts as health board and no salaries are paid.

Landingville, Schuylkill County.

No contagious diseases have been reported during the year, and the sanitary conditions of the borough have been good. General registration has been enforced.

Salary of secretary, \$5.00 per annum.

Salary of health officer, \$2.50 per annum.

Lanesboro, Susquehanna County.

Contagious diseases reported. Houses placarded and quarantined. Whooping cough has been unusually prevalent, but there have been few other contagious diseases.

Salary of secretary, \$16.00 per annum.

Salary of health officer, \$25.00 per annum.

Lansdowne, Delaware County.

Contagious diseases reported. Houses placarded and quarantined. There have been but few cases of contagious diseases and only one death resulting from them. Registration partially enforced, including that of vaccination of school children.

Salaries paid health officers, \$150.00 annually.

Lansford, Carbon County.

Contagious diseases reported. Houses placarded and quarantined. Whooping cough has been unusually prevalent during the year. Registration is partially enforced, including that of vaccination of school children.

Salary of secretary, \$6.00 per month.

Salary of health officer, \$10.00 per month.

Lewistown, Mifflin County.

Contagious diseases are not reported. Whenever possible houses are placarded and quarantined. There have been slight epidemics of diphtheria and scarlet fever in the borough, resulting in (3) three deaths from the former disease. Registration is not enforced.

Salary of health officer, \$10.00 per month.

Lower Providence, Montgomery County.

Contagious diseases reported. Houses placarded and fumigated. Whooping cough and measles in mild form have been unusually prevalent. Registration of vaccination of school children is enforced.

Health officer receives \$3.00 for each residence which is quarantined and fumigated.

Ludwick, Westmoreland County.

Contagious diseases reported. Houses placarded and quarantined. Mumps, measles and whooping cough have been unusually prevalent and there have been three cases of small-pox in the borough.

No salaries paid.

Mahoning, Lawrence County.

No contagious diseases have been reported during the year, and the sanitary conditions have been good.

Manheim, Lancaster County.

Contagious diseases reported and houses placarded. The sanitary conditions have been unusually good. Registration is not enforced, but children are not admitted to the public schools unless vaccinated.

Salary of secretary, \$15.00 per annum.

Mayfield, Lackawanna County.

Contagious diseases reported and houses placarded. Six cases of diphtheria, with two deaths, and five of scarlet fever, with one death, have occurred during the year.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$50.00 per annum.

Salary of sanitary police, \$35.00 per annum.

McKeesport, Allegheny County.

Death Rate.

The total number of deaths were 799, equal to a death rate of 20.48. Death rate, excluding death by violent accident and still-born, 14.76 per 1,000 inhabitants, based upon an estimated population of 39,000, or one death in every 48.81 persons. This is the highest annual death rate since the organization of the board of health, April 14, 1892.

Eighty-eight patients brought from outside of the city to be treated in the McKeesport hospital during the year died, being 16 more than the year of 1901.

During the past year there were 442 deaths of infants under one year of age, and 86 between the age of one and five years, making 66.08 per cent. of the total mortality. Of the decedents 584 were of native and 215 of foreign birth. Of the former number 32 were colored.

Infectious Diseases.

There were 666 cases of infectious diseases reported during the year, with 67 deaths, equal to 10 per cent. of the total mortality of the diseases required by law to be reported.

Measles caused 1 death; 295 cases less than the preceding year were reported to the health board.

Diphtheria, diphtheritic and membranous croup were the cause of 20 deaths.

Scarlet fever.—There were 64 cases reported during the year, and 1 death.

Typhoid Fever.—There were 262 cases of this disease reported during the year and a mortality of 30, being 11½ per cent. of the cases reported.

Small-pox.—There were 91 cases of small-pox during the year, with 12 deaths, equal to 12 per cent. of the total mortality of the

disease. Not one victim of the small-pox died that had been successfully vaccinated.

The first case developed January 26, in the McKeesport Hospital. There were 67 outbreaks and 19 additional outbreaks confined to the first house. The greatest number of cases developed in the Third ward. Nine patients were colored. The small-pox victims aged from 1 to 83 years. About 60 per cent. never had been vaccinated. Thirty-four patients were taken to the municipal hospital for treatment and 57 patients absolutely refused to be taken to the municipal hospital, and were quarantined, treated and cared for at their respective homes.

Births.

The number of living infants born during the year in the city was 1,207.

Still Births.

The number of dead born infants reported during the year has been 52.

Vaccination.

The board of health ordinance, No. 3, governing the admission to and attendance upon all the schools in the city is being complied with. Each school is supplied with a vaccination registry by the school controllers, and the said registry is inspected by the health board. Two hundred and sixty-eight bulletins were sent to the schools, notifying them of families where contagious diseases existed, and 151 bulletins were sent to the Carnegie public library.

Vital Statistics—McKeesport.

Number of Deaths, 1902.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Death in the city,	74	52	40	74	58	71	71	62	73	48	53	71
Still born,	4	2	3	2	1	6	2		5	3	9	9
Total,	78	54	43	76	59	77	73	68	78	51	62	80
Sex and Color.												
Male, white,	48	30	24	51	38	48	35	40	42	29	35	39
Female, white,	28	21	17	21	18	27	34	24	31	20	27	39
Male, black,	1	1	2	1	3	...	3	1	3	2	...	2
Female, black,	1	2	...	3	...	2	1		2	...	...	...
Not given, .....	...	...	...	...	...	...	...		...	...	...	...
Total,	78	54	43	76	59	77	73	68	78	51	62	80

Vital Statistics, McKeesport—Continued.

Number of Deaths, 1902.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Ages.													
Under 1 year,	18	13	16	21	19	30	32	28	23	18	10	14	442
1 to 5 years,	8	5	1	10	3	6	9	8	10	9	8	9	86
5 to 10 years,	3	2	2	2	2	2	2	2	11	2	2	2	33
10 to 20 years,	10	4	4	4	8	8	3	1	4	2	1	4	50
20 to 40 years,	16	10	7	17	9	14	12	9	14	5	14	16	143
40 to 60 years,	12	7	3	14	13	7	9	7	10	10	9	9	107
60 to 80 years,	6	10	7	8	4	9	4	6	1	1	9	9	73
80 to 90 years,	1	1	1	1	1	1	1	1	4	1	2	2	10
Over 90 years,	1	1	1	1	1	1	1	1	1	1	1	1	1
Not stated,	4	2	3	2	1	6	2	6	5	3	9	9	52
Still born,	4	2	3	2	1	6	2	6	5	3	9	9	52
Total,	78	54	43	76	59	77	73	68	78	51	62	80	799
Social Condition.													
Married,	24	15	12	22	20	20	12	15	17	12	23	19	211
Single,	52	32	29	48	39	53	52	48	57	37	33	53	533
Widowed,	2	7	2	5	4	6	2	3	2	2	5	8	46
Divorced,	1	1	1	1	1	1	1	1	1	1	1	1	1
Not given,	1	1	1	1	1	1	1	1	1	1	1	1	1
Unknown,	1	1	1	1	1	1	1	1	1	1	1	1	1
Total,	78	54	43	76	59	77	73	68	78	51	62	80	799

Report of Contagious Diseases.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria,	9	2	11	3	2	2	2	10	13	14	21	10	97
Diphtheritic croup,	1	1	1	1	1	1	1	1	1	1	1	1	2
Membranous croup,	1	1	1	1	1	1	1	1	1	1	1	1	7
Scarlet fever,	13	5	2	2	6	3	2	3	3	8	1	1	64
Typhoid fever,	23	16	12	32	22	14	17	23	44	27	14	8	262
Measles,	1	4	14	18	27	15	4	4	4	3	18	34	142
Cerebro spinal meningitis,	1	1	1	1	1	1	1	1	1	1	1	1	1
Small-pox,	1	1	1	1	1	4	10	9	31	10	7	2	76
Variceloid,	1	1	1	1	1	1	1	1	6	6	2	1	15
Total,	58	26	29	52	48	51	47	49	101	69	72	64	656

Annual Death Rate, 1892-1902.

Year.	Population.	Deaths.	Per 1,000 living.
1892,*	26,000	334	12.84
1893,	27,000	464	17.13
1894,	28,000	454	16.21
1895,	28,000	444	15.85
1896,	30,000	537	17.90
1897,	30,000	468	15.60
1898,	35,000	528	15.08
1899,	35,500	589	16.59
1900,	35,500	684	19.26
1901,	36,000	693	19.25
1902,	39,000	793	20.48
Average,	31,818	545	16.93

*Eight months.

Recapitulation of Births, Marriages, Deaths and Contagious and Infectious Diseases in McKeesport During the
Last 11 Years, Ending December 31, 1902.

Years.	Births.	Marriages.	Deaths.	Typhoid fever.	Diphtheria.	Membranous croup.	Diphtheritic croup.	Scarlet fever.	Cerebro spinal menin- gitis.	Measles.	Small-pox.	Deaths from contagious and infectious diseases.
1892.*	217	36	334	22	42	.....	.....	24	.....	.....	1	34
1893.	916	181	464	123	45	.....	.....	85	.....	288	.....	48
1894.	936	153	464	63	45	.....	.....	82	3	116	1	34
1895.	936	178	444	289	40	2	.....	72	.....	216	.....	42
1896.	1,141	200	537	144	47	.....	.....	42	2	223	.....	33
1897.	1,078	161	468	86	45	9	10	30	.....	100	1	33
1898.	1,181	162	528	100	67	8	8	28	.....	378	.....	33
1899.	1,184	171	589	131	98	15	13	66	1	79	.....	44
1900.	1,152	186	684	315	60	13	4	198	4	659	3	63
1901.	1,120	186	693	275	65	5	5	176	2	487	9	58
1902.	1,207	193	799	262	97	7	2	64	1	142	91	67
Totals.	12,156	1,773	5,994	1,940	631	60	42	867	14	2,638	106	489

*Eight months.

Salary of secretary, \$1,125.00 per annum.

Salary of health officer, \$1,125.00 per annum.

McSherrystown, Adams County.

Contagious diseases reported. Houses placarded and quarantined.
Registration not enforced.

Salary of secretary, \$20.00 per annum.

Salary of health officer, \$30.00 per annum.

Meadville, Crawford County.

Contagious diseases reported. Houses placarded and quarantined. There have been 48 cases of typhoid resulting in 11 deaths, but 8 of the cases were brought from other places. Scarlet fever and diphtheria have also been unusually prevalent. Partial registration is enforced.

Salary of secretary, \$300.00 per annum.

Salary of health officer, \$300.00 per annum.

Mechanicsburg, Cumberland County.**School Sanitation.**

A case of scarlet fever and a case of diphtheria having occurred in October, and both cases having attended their respective schools on the day previous, the said schools were immediately closed by the board and the buildings thoroughly disinfected with formaldehyde gas, since which time no further cases have developed, thus showing that this system of isolation, quarantine and disinfection bear most excellent results.

Vaccination.

The absence of any case of small-pox in the borough since 1893-4 has induced the board to temporarily suspend the enforcement of the provisions of the act of Assembly (1895) empowering the right of enforced vaccination.

Birth Record.

The births number 62, a decrease of 8 compared to 1902, or 9 per cent. minus. Singular as it may seem, not one child was born to black parents during the year.

	White.	
	Males.	Females.
January,	3	1
February,	1	2
March,	4	1
April,	2	.....
May,	3	2
June,	1	3
July,	4	7
August,	6	2
September,	1	1
October,	7	6
November,	2	2
December,	1	.....
Total,	35	27

Decrease in Deaths.

In 1901 77 deaths were reported. For 1902 but 67, a decrease of 10, or 15 per cent. minus. This shows a death rate per 1,000 inhabitants of 15.87 per cent. plus. But one death occurred from an infectious disease (typhoid fever), and that was contracted out of town, and none from contagious diseases.

Thirty-six (36) persons died aged between 60 and 103 years, or 54 per cent. plus, and all deaths occurred from such causes as baffle the skilful physician.

Deaths.

	White.		Black.	
	Male.	Female.	Male.	Female.
January,	2	4	.....	.....
February,	3	3	.....	.....
March,	6	3	.....	.....
April,	5	5	1	.....
May,	5	3	1	.....
June, .....	.....	2	.....	.....
July,	1	2	1	.....
August,	1	3	.....	.....
September,	1	4	.....	.....
October, .....	.....	.....	.....	.....
November,	3	2	1	.....
December,	3	2	.....	.....
Total,	30	33	4	.....

Range of Death—Mechanicsburg.

0 to 10 years,	15	70 to 80 years,	13
10 to 20 years,	1	80 to 90 years,	9
20 to 30 years,	1	90 to 100 years,	2
30 to 40 years,	2	100 years,	1
40 to 50 years,	5		
50 to 60 years,	7	Total,	67
60 to 70 years,	11		

Causes of Death.

Burn,	1	Cynosis,	1
Progressive paralysis,	1	Senilis atrophy,	1
Organic heart disease,	1	Acute gastritis,	1
Valvular disease of heart,	2	Rickets,	1
Apoplexy,	6	Dropsy,	1
Hydropericardium,	1	Uremic coma,	1
Bronchitis,	1	Cardiac asthma,	1
Pneumonia,	1	Carcinoma of liver,	1
Bright's disease,	1	Abscess of lungs,	1
Cancer of stomach,	2	Inanition,	1
La grippe,	2	Jaundice,	1
Hemorrhage of aorta,	1	Shock—fright,	1
Heart failure,	3	Cerebral hemorrhage,	4
Hydrocephalus,	1	Marasmus,	1
Pulmonary tuberculosis,	1	Convulsions,	4
Pulmonary abscess,	1	Chronic suppurate nephritis,	1
Paralysis,	5	Epithelioma of womb,	1
Phthisis pulmonalis,	1	Septicemæ,	1
Inflammation of bowels,	1	Alcoholism,	1
Consumption,	1	Typhoid fever,	1
Old age,	3	Fatty degeneration of heart,	1
Unknown (infant),	1		

Contagious Diseases.

Month.	Scarlet fever.	Diphtheria.	Typhoid fever.	Deaths.
February,			1	
March,	1			
May,			1	
September,	1		6	1
October,	2	1	5	
November,			2	
December,			1	
Total,	4	1	16	1

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$75.00 per annum.

Media, Delaware County.
Births and Deaths.

Years.	Number of deaths.	Number of deaths to each 1,000 of population.	Living persons to each death.	Number of births.	Number of births to each 1,000 of population.	Living persons to each birth.	Population.
1894,	42	14.6	68.2	63	22	45.5	2,867
1895,	45	15.5	64.4	47	16.2	61.7	2,900
1896,	45	15.3	65.2	52	17.7	56.4	2,824
1897,	43	14.4	68.5	52	17.5	57	2,889
1898,	38	12.6	79	65	21.6	46.2	3,004
1899,	60	19.7	50.6	44	14.4	69	3,040
1900,	39	12.6	78.8	37	12	83	3,075
1901,	38	12.1	82.1	51	16	61	3,121
1902,	36	11.3	88	44	13.8	72	3,167
Averages,	43	14.2	70	50	16.8	60	3,008

Ages at Death.

Years.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Under 1 year,	7	3	7	12	9	7	4	5	5	59
1 to 5 years,	2	5	5	.....	2	5	2	2	1	24
5 to 10 years,	2	2	3	1	1	3	.....	2	.....	14
10 to 15 years, .....	.....	4	3	.....	.....	1	.....	.....	.....	11
15 to 20 years,	1	1	1	.....	.....	.....	.....	.....	1	4
20 to 25 years,	3	3	3	6	.....	6	1	.....	.....	22
25 to 30 years,	6	.....	3	3	1	3	5	2	4	27
30 to 35 years,	3	1	5	2	2	4	6	3	1	27
35 to 40 years, .....	.....	4	2	1	4	6	3	1	2	23
40 to 45 years,	7	6	3	9	5	13	4	7	6	60
45 to 50 years,	9	6	6	6	8	8	5	6	11	65
50 to 55 years,	2	7	4	3	5	3	6	6	4	40
55 to 60 years, .....	.....	3	.....	.....	1	1	.....	3	1	9
60 to 65 years, .....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Over 100 years, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals,	42	41	45	43	38	60	29	28	36	395

The most noticeable feature of the above table, common to all such tables, is the number of deaths of babies under 1 year and of children under 10 years. There were, as will be seen, 59 deaths under 1 year, or by combining the number in the first decade the figures rise to 97, or 25 per cent. of the whole number of deaths. As an offset to the rather lamentable showing it may be seen that 175, 46 per cent., or nearly one-half of the whole lived to be over 60, 115 to be over 70, 50 to be over 80, 10 to be over 90 and one reached the advanced age of 100 years, 8 months and 26 days.

Causes of Death.

Disease.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Abscess,	1	1	1	1		1				5
Anaemia,	1					1	3			5
Apoplexy,	1	4	4	3	7	2		1	6	28
Appendicitis,		1								1
Asthma,								1		1
Bladder, catarrh of,	1									1
Bowel, perforation of,	1									1
Brain, disease of,		1		2					2	5
Bronchitis,		2						2		4
Cancer,	4	1	1		2	4	3	3	2	20
Carbuncle,		1								1
Cholera infantum,	4	2	1	1	2	3		1		14
Convulsions,	2	2	2	2		1	1		1	11
Cyanosis,				1						1
Delirium tremens,					1					1
Diabetes mellitus,				1		1				2
Diphtheria,	1	3	2				3	2		11
Drowning, accidental,			1			1				2
Dysentery,					1	1				2
Enteritis,							1	1		2
Erysipelas,				1						1
Exhaustion,	2		1		2					5
Fever, remittent,							1			1
Fever, typhoid,		1				2	1			4
Fever, typhus-malarial,	1									1
Gastro-enteritis,	2	1	2	1	2	3		2	2	15
Heat exhaustion,	1									1
Heart disease,	3	8	6	6	3	9	4	2	6	47
Hemorrhage,				1		2		2		5
Inanition,	1				2	3		2	1	9
Influenza,								1		1
Intestinal obstruction,			1				1			2
Kidney, Bright's disease of,	2		3	2		5	2	3	2	19
Lungs, congestion of,			1			2	1	1		5
Liver, cirrhosis of,			1			1		1		3
Liver, inflammation of,									1	1
Neurasthenia,						1				1
Marasmus,			2	4						6
Meningitis, cerebral,		1	2		2	3	2			10
Meningitis, cerebro-spinal,									2	2
Paralysis,		2	1	2	2	1		3		11
Peritonitis,		1	1				1			3
Pertussis,				1						1
Pleurisy,								1		1
Pneumonia,		4	3	6	2	3	5	2	1	26
Poisoning, strychnine,		1								1
Senile debility,	4	3	1		2	1	2	3	2	18
Senile gangrene,		1	1					1		3
Septic, puerperal,	1					1				2
Stomach, catarrh of,	1									1
Suicide, hanging,	1						1	1	3	5
Suicide, "rough on rats,"			1							1
Thrombosis,			1							1
Tuberculosis,	6	4	4	8	4		7	3	4	45
Uraemia,	1		1		4		1	1	1	9
Varicella,									1	1
Totals,	42	45	45	43	33	60	39	38	36	386

Salary of secretary, \$100.00 per annum.

Salary of health officer, \$100.00 per annum.

Mifflinburg, Union County.

Contagious diseases reported. Houses placarded and quarantined. The borough has been very free from such cases during the year. Registration is not enforced.

Salary of health officer, \$2.00.

Milesburg, Centre County.

Houses are placarded and quarantined for contagious diseases, but the borough has been free from such diseases during the year, excepting a few cases of measles. General registration enforced.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$5.00 per annum.

Milford, Pike County.

Contagious diseases reported. Houses placarded and quarantined. The borough has been quite free from such cases during the year. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$5.00 per annum.

Millersburg, Dauphin County.

Contagious diseases reported. Houses placarded and quarantined. Registration is not enforced.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$15.00 per annum.

Millvale, Allegheny County.

The principal contagious diseases are reported and the houses quarantined. There have been very few such cases in the borough during the year. Registration is not enforced.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$228.00 per annum.

Milton, Northumberland County.

Contagious diseases reported. Houses placarded and quarantined. The borough has been free from such cases during the year, and the sanitary conditions have been improved by the laying of a sewerage system. Registration of vaccination of school children is enforced.

Salary of secretary, \$8.00 per month.

Salary of health officer, \$5.00 per month.

Minersville, Schuylkill County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. There were 69 cases of scarlet fever of a mild type during the year, resulting in two deaths. Otherwise there were few contagious diseases, and the general sanitary conditions have been good. New sewers are being constructed as rapidly as possible. Partial registration is enforced, including that of vaccination of school children.

Salary of secretary, \$100.00 per annum.

Salary of health officer, \$300.00 per annum.

Monessen, Westmoreland County.

Contagious diseases reported. Houses placarded and quarantined. Typhoid fever and pneumonia have been unusually prevalent. Of the former disease there were 100 cases and 9 deaths, and the epidemic was attributed to the fact that while improving its water works the company pumped directly from the Monongahela river.

Salary of secretary, \$15.00 per month.

Salary of health officer, \$25.00 per month.

Montgomery, Lycoming County.

Contagious diseases reported and houses placarded. Pneumonia and measles have been prevalent during the year. Registration of vaccination of school children is enforced.

No salaries given.

Montoursville, Lycoming County.

Contagious diseases reported. Houses placarded and quarantined. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$10.00 per annum.

Morton, Delaware County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. Five cases of small-pox occurred, but all the patients recovered. Partial registration is enforced and unvaccinated children are not admitted to the schools.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$15.00 per annum.

Mt. Carmel, Northumberland County.

Contagious diseases reported. Houses placarded and quarantined. Diphtheria and scarlet fever have been quite prevalent and there have been 92 cases of small-pox, resulting in 13 deaths. General registration is enforced.

Salary of secretary, \$15.00 per month.

Salary of health officer, \$30.00 per month.

Mt. Jewett, McKean County.

Contagious diseases reported. Houses placarded and quarantined and, in cases of small-pox, guarded. The borough has been improved by the construction of additional sewers.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$60.00 per annum.

New Albany, Bradford County.

The borough has been free from contagious diseases during the year except for one case of scarlet fever. Registration of vaccination of school children is enforced.

New Brighton, Beaver County.

Contagious diseases reported. Houses placarded and quarantined. Registration partially enforced, and no unvaccinated children admitted to school.

Salary of secretary, \$65.00 per annum.

New Castle, Lawrence County.

Contagious diseases reported. Houses placarded and quarantined. Pneumonia and typhoid fever have been unusually prevalent in the borough, there having been 316 cases of the latter disease and 39 deaths. General registration enforced.

Salary of health officer, \$50.00.

Newtown, Bucks County.

Contagious diseases reported and houses placarded.

There were no contagious diseases during the year. There were a number of cases of typhoid fever, confined to two contiguous houses, and believed to have been caused by infected wells. Street water has since been introduced.

Number of marriages, 11; average for 9 years, 7.

Number of births, white, 33; black, 3. Male, 22; female, 14; total, 36; average for 9 years, 37.

Number of deaths, 27; average for 9 years, 22; number of deaths per 1,000, 17.25.

Ages.

Under 1 year,	7	60 to 70 years,	1
1 to 10 years,	2	70 to 80 years,	7
40 to 50 years,	2	80 to 90 years,	5
50 to 60 years,	2	90 to 100 years,	1

Causes of Death.

Bright's disease,	1	Hemorrhage,	1
Burns,	1	Indigestion,	3
Cancer,	2	Killed on railroad,	1
Chronic bronchitis,	1	Meningitis,	1
Convulsions,	2	Old age,	4
Diarrhoea,	1	Paralysis,	1
Dysentery,	1	Pneumonia,	2
Heart disease,	3	Uræmia,	2

Permits issued—Burial, 27; transit, 2; building, etc., 10.

Fees paid borough treasurer, \$14.50.

Montgomery County.
Cause and Number of Deaths.

	Male.	Female.	White.	Black.	Adults.	Children.	Total.
Acute inflammation	2	1	3		1	2	3
Cholera	4	4	8		8		8
Septicemia		1	1		1		1
Septicæmia	2		2			2	2
Acute rheumatism	1		1		1	1	1
Acute inflammation	1		1		1		1
Amnesia		1	1			1	1
Acute pharyngitis		1	1			1	1
Acute inflammation of l. walls	1		1			1	1
Acute meningitis	1	1	2			2	2
Alcoholism	1		1		1		1
Epilepsy and convulsions	1	1	1		1		1
Acute dilatation	1		1		1		1
Anæsthesia		1	1		1		1
Breast disease	1	1	2		2		2
Bronchial catarrh		1	1			1	1
Bronchitis	2		2			2	2
Broncho pneumonia		1	1		1		1
Burns	1		1			1	1
Consumption	3		3		3		3
Catarrhal pneumonia	2	5	4	3	1	6	7
Cyanosis	1		1			1	1
Convulsions	6	7	12	1		12	12
Carcinoma uteri	1		1				1
Collapse	1		1				1
Chronic nephritis	1		1				1
Cerebral pneumonia	1		1			1	1
Cerebritis		1	1		1	1	1
Cardiac paralysis	1		1				1
Cardiac failure	1		1		1	1	1
Cerebral paralysis	1		1		1		1
Cerebral meningitis	1		1		1		1
Cancer of jaw	1		1		1		1
Cancer of breast					1		1
Cancer of stomach					2		1
Cancer of rectum	2		1				2
Cancer of lung	4		4		2	5	5
Cancer of bladder	1		1				2
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1
Cancer of epithelium					1		1
Cancer of endothelium					1		1
Cancer of mesothelium					1		1
Cancer of peritoneum					1		1
Cancer of pleura					1		1
Cancer of pericardium					1		1
Cancer of heart					1		1
Cancer of lungs					1		1
Cancer of liver					1		1
Cancer of stomach					1		1
Cancer of intestines					1		1
Cancer of rectum					1		1
Cancer of bladder					1		1
Cancer of prostate					1		1
Cancer of uterus					1		1
Cancer of ovary					1		1
Cancer of vagina					1		1
Cancer of cervix					1		1
Cancer of penis					1		1
Cancer of testis					1		1
Cancer of skin					1		1
Cancer of bone					1		1
Cancer of cartilage					1		1
Cancer of muscle					1		1
Cancer of nerve					1		1
Cancer of gland					1		1
Cancer of blood vessel					1		1
Cancer of lymphatic					1		1
Cancer of connective tissue					1		1

Cause and Number of Deaths—Norristown—Continued.

Diagnosis.	Male.	Female.	White.	Black.	Adults.	Children.	Total.
General exhaustion,	2	1	3		3		3
General tuberculosis,	1		1		1		1
General progressive paralysis,		1	1		1		1
Heart disease and dropsy,	1		1		1		1
Heart disease,	3		3		2		3
Heart failure,	13	11	13	1	20	1	24
Hypostatic pneumonia,		1	1		1	4	1
Heart paralysis,	1		1		1		1
Hydrocephalus,	1		1				1
Inanition,	6	4	10		2	1	10
Injuries received on railroad,	3		2		2	8	2
Injuries received from fall,	1		1		1		1
Injuries received by trolley,	1		1				1
Involving heart,		1	1		1	1	1
Jaundice,	1		1				1
La grippe and congestion of lungs,	1		1		1	1	1
Marasmus,	3	4	6	1			7
Meningitis,	2		2			7	2
Neuralgia of heart,	1		1		1	2	1
Mitral sclerosis,		1	1			1	1
Nephritis,		1	1		1		1
Old age,	1	1	2		2		2
Organic disease of heart,	1	1	2		2		2
Oedema of lungs,	2		1	1	2		2
Oedema,		1	1		1		1
Oedema of larynx,		1	1			1	1
Paralysis of bowels,		1	1				1
Phthisis pulmonalis,	1	1	1	1	2		2
Premature birth,	2	2	3	1		4	4
Pneumonia,	3	4	7		5	2	7
Paralysis,	1	1	2		2		2
Pleuritic effusion,	1		1		1		1
Perforation of bowel,		1		1	1		1
Paralysis of heart,	3		3		2	1	3
Phthisis,		2	1	1	1	1	3
Purpura hemorrhagica,	1		1			1	1
Palsy,	1		1		1		1
Pulmonary tuberculosis,		1	1		1		1
Pulmonary embolus,		1	1		1		1
Peritonitis,	1	1	1	1	2		2
Paresis and exhaustion,	2		2		2		2
Renal colic,	1		1		1		1
Run over by freight train,	1		1			1	1
Small-pox,	2		2		1	1	2
Shock and cerebral hemorrhage,		1	1		1		1
Still born,	11	7	16	2		18	18
Shock,	1	2	3		2	1	3
Spasms,		1	1			1	1
Senility,	1		1		1		1
Senile debility,	1		1		1		1
Softening of brain,	1		1		1		1
Typhoid fever,	3	2	5		5		5
Tubercular meningitis,		1	1		1		1
Tuberculosis,	3	3	6		4	2	6
Tetanus,	1	1	1		1		1
Uraemia,	3	4	7		6	1	7
Uraemic convulsions,		1	1		1		1
Ulceration of bowels,	1	1	1		1		1
Valvular disease of heart,	6	3	8	1	7	2	9
Vascular sclerosis,	1		1		1		1
Total,	164	152	297	19	191	126	316

Contagious Diseases.

	Diphtheria	Typhoid fever	Measles	Varicella	Scarlet fever
Cases registered,	42	29	15	2	4
Deaths,	1	7	2	.....	.....

The mortuary report shows the local deaths to have been 316. The population being about 25,000, gives a death rate per 1,000 of 12.64. If we omit still born and violent deaths the death rate is 11.6.

Report of Small-Pox Hospital.**Admissions.**

On the 14th of November, 1901, between 8 p. m. and 2 a. m., the first patients, 6 in number, were admitted to the Norristown municipal hospital. The next day 7 more patients came in, followed by 3 on the 17th, 4 on the 18th and 3 on the 19th, a total of 26 admissions inside of six days. Then came a lull for nine days.

On 11-28 there were 2 admissions; 11-29, 2; 11-30, 2; 12-1, 2; 12-4, 1; 12-6, 1; 12-7, 3. No more were admitted from Norristown till 12-24, one each having come in from Spring Mill and Mont Clare in the interim.

Then again a number of cases of the most virulent type were admitted as follows: 12-24, 2; 12-25, 2; 12-26, 2; 12-27, 1; 12-28, 1; 12-29, 1; 1-1, 1; 1-2, 1; 1-3, 1; 1-4, 1, and less frequently from then on.

Deaths.

Nine died, as follows: 11-17, 2; 11-22, 1; 1-23, 1; four in the first few days; 1-1, 1; 1-7, 1; 1-22, 1; 2-13, 1; 2-14, 1.

Of those dying, one was from Hickorytown, one from Bridgeport, one from Phoenixville, one from Malvern, one from Willow Grove, four from Norristown.

Not one of these nine had ever been vaccinated.

Table Showing Admission, Discharges and Deaths—Norristown.

	Admissions.	Deaths.	Discharges.
November,	32	4	.....
December,	19	.....	21
January,	18	3	15
February,	4	2	17
March,	1	.....	6
April, .....	.....	.....	6
Total,	74	9	65

North Clarendon, Warren County.

Contagious diseases reported and houses quarantined, but with the exception of a few cases of measles the borough has been free from such diseases. Registration of vaccination of school children is enforced.

Salary of secretary, \$20.00.

Northumberland, Northumberland County.

Mortuary Record.

Convulsions,	2	Bright's disease,	1
Whooping cough,	2	Tumor (abdomen),	1
Pneumonia,	4	Phthisis,	1
Ascitis,	1	Imperfect heart,	1
Apoplexy,	3	Cholera infantum,	1
Scarlet fever,	1	Typhoid,	1
Heart disease,	2	Cancer (mouth),	1
Heart failure,	4	Bronchitis,	1
Accident,	3	Uraemia,	2
Old age,	3		

Range of Ages.

Under one year,	7	Between 50 and 60 years,	3
Between 1 and 10 years,	4	Between 60 and 70 years,	6
Between 10 and 20 years,	3	Between 70 and 80 years,	6
Between 20 and 30 years,	2	Between 80 and 90 years,	4
Between 30 and 40 years,	0		
Between 40 and 50 years,	0	Total,	35

During the year five cases of scarlet fever were reported and one death. Three cases of diphtheria were reported—no deaths.

There were no reports of contagious diseases of any kind between March 11 and December 13, a period of more than nine months.

Small-pox.

On the latter date four cases of small-pox were reported in one family at Third and Hanover streets, and one on North Front above B street. On the following day a case was reported at Sixth and Queen streets, and on the 17th another developed on the Tuckahoe road. All dwellings were promptly placarded and yellow flags hoisted. The disease was confined to four families, but new cases developed until fourteen of a total of twenty-three persons quarantined were stricken. The last one was reported on December 24.

Vaccination.

Of 14 persons attacked 10 had never been vaccinated, 1 unsuccessfully vaccinated and 3 others were inoculated during incubation and, consequently, too late to stay the progress of the disease.

Of the 8 who did not take the disease all had been successfully vaccinated.

Of the above, 8 were adults and 6 were children from 1 to 8 years of age. There were no deaths.

This statement proves the value and importance of vaccination. Compulsory vaccination was resorted to so far as school children were concerned. Ninety per cent. of the general public were recently or had previously been successfully vaccinated.

Quarantine.

All houses where small-pox existed were quarantined for a period ranging from twenty-eight to thirty-five days from the time of eruption, after which time all were fumigated with formaldehyde gas, produced by a generating apparatus. At the same time the liquid was evaporated from sheets as an additional precaution. From eight to twelve pounds of formaldehyde were used in each dwelling. The public school buildings and city factory were also thoroughly disinfected.

Salary of secretary \$25.00

Salary of health officer \$16.00

Oakdale, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined. Registration not enforced, excepting of vaccination of school children.

Salary of secretary, \$1.00 per month.

Health officer receives 25 cents for each quarantine or nuisance notice.

Oakland, Susquehanna County.

There have been no contagious diseases in the borough during the past year, but when such cases occur they are quarantined and the houses placarded. The sewerage system has been extended, but there is still need for improvement in this direction.

Salary of secretary, \$12.00 per annum.

Salary of health officer, \$25.00 per annum.

Oakmont, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined. Measles and whooping cough have been unusually prevalent, and 15 cases of typhoid fever resulted in 3 deaths. Partial registration is enforced, including that of vaccination of school children. At a regular meeting of the board of health the following resolution in regard to whooping cough was adopted:

Whereas, Whooping cough is a contagious disease of childhood from which comparatively few children escape, in order to shield as many as possible, especially infants and those who from any cause are weak or feeble, be it hereby

Resolved, That whooping cough is declared to be communicable and dangerous to the public health; all cases should be isolated as far as possible from well children. Attendance at school of any kind is forbidden or at church or at any dwelling in which there are children who have not had the disease, and from traveling in public conveyances; and children who have not had the disease should on no account be allowed to enter a house in which the disease exists; be it further

Resolved, That physicians report cases of whooping cough which they are called upon to treat, to the board upon the blanks furnished

for reporting contagious and infectious diseases; and that whooping cough be included in the list of diseases under section 20 of ordinance No. 59 and rules and regulations of the board of health.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$300.00.

Oil City, Venango County.

The following contagious diseases have been reported:

Typhoid fever,	16	Chicken-pox,	1
Diphtheria,	7	Scarlet rash,	1
Scarlet fever,	43	Rubeola,	1
Scarlatina,	6	Erysipelas,	1
Mumps,	2		
Measles,	5		
Small-pox,	8	Total,	91

Grouped by months these were reported as follows:

	Typhoid fever.	Diphtheria.	Scarlet fever.	Scarlatina.	Mumps.	Measles.	Small-pox.	Chicken-pox.	Scarlet rash.	Rubeola.	Erysipelas.	Total.
January,				1			5	1				7
February,	2											2
March,	3		2			1						6
April,	1	2		2	1	1	1					8
May,	1	3	3		1							8
June,	2	1										3
July,	1		3			1						5
August,	2		1						1	1		5
September,			4	1		1						6
October,	1	1	14	1		1						18
November,	1		9	1			1					12
December,	2		7				1				1	11
Total,	16	7	43	6	2	5	5	1	1	1	1	91

An analysis of the record of the 16 cases of typhoid fever for the year shows that 7 cases originated in this city, and of the remaining 9 cases, one case was a non-resident brought here for treatment, the others being residents who contracted the disease outside of the city.

Of this total number of 16 cases 4 were treated at the hospital (Seventh ward).

Antitoxin was used in the treatment of two of the seven cases of diphtheria. All of the cases of diphtheria reported recovered. One case of diphtheria and one case of scarlatina were treated at the hospital.

Of the 43 cases of scarlet fever reported, all recovered but one case, and of the total four were removed to the hospital. During the epidemic of scarlet fever the latter part of the year, the majority of cases that occurred were of a mild type. Of the eight cases of small-pox, four were treated at the municipal hospital, which was hastily erected for the purpose, in the First ward, and two cases which developed in the Oil City Hospital were treated in the annex. The other two cases were quarantined in their home. The latter two were in one family, one of these and two of the other six were working at the time they were stricken. One of the cases contracted the disease outside of the city and was taken sick the day he arrived home. The wisdom of providing a portable municipal hospital was shown when the disease first appeared and it was impossible to secure any other place for the treatment of the patients. The two cases of small-pox treated at the hospital annex were brought to the hospital for treatment and there were no symptoms of the disease when admitted to that institution, but shortly after their admission they developed symptoms of small-pox and were promptly removed to the hospital annex, where they were placed under a strict quarantine.

The records for Oil City show that deaths were reported as follows:

	Hospital.	Total.
January,	1	15
February,	2	15
March,	1	13
April,	1	9
May,		4
June,	1	8
July,	3	12
August,		13
September,	2	6
October,	1	5
November,	3	10
December,	4	12
Total,	19	118
Still born,		11

Of the total of 19 deaths for the year at the hospital, 11 were non-residents, the other 8 being residents taken there for treatment.

There was a total of 12 deaths of non-residents in the city limits for the year, including those occurring in the hospital.

Causes of Death.

Diseases of the Respiratory Tract.

Phthisis.	1	
Pneumonia.	5	
Catarrhal fever.	1	
Congestion of lungs.	1	
Tuberculosis.	6	
Bronchitis.	1	
<hr/>		
Total.		15

Diseases of the Nervous System.

Apoplexy.	4	
Convulsions.	2	
Locomotor ataxia.	1	
Meningitis.	1	
Puerperal convulsions.	1	
Spasms.	1	
Uremic convulsions.	1	
<hr/>		
Total.		11

Diseases of the Circulatory System.

Heart disease.	6	
Valvular disease of heart.	3	
Fatty degeneration of heart.	1	
Cardiac failure.	2	
Cerebral hemorrhage.	2	
Pericarditis.	1	
Atheroma.	1	
<hr/>		
Total.		16

Diseases of the Urinary System.

Bright's disease.	1	
Nephritis.	2	
Chronic nephritis.	4	
Acute interstitial nephritis.	1	
Diabetes.	2	
Kidney disease.	1	
<hr/>		
Total.		11

Diseases of the Digestive System.

Cholera infantum,	6	
Intestinal indigestions,	2	
Cirrhosis of liver,	1	
Inflammation of bowels,	2	
Appendicitis,	1	
Tabes mesenteric,	1	
Cholera morbus,	1	
Peritonitis,	2	
<hr/>		
Total,		16

Malignant Diseases.

Cancer of rectum,	1	
Cancer of mesentery,	1	
Cancer of stomach,	1	
Cancer,	1	
Carcinoma,	2	
<hr/>		
Total,		6

General Diseases.

La grippe,	2	
Gangrene,	2	
Gangrene, senile,	1	
General weakness,	2	
Old age,	2	
Malnutrition,	1	
Marasmus,	1	
Senility,	3	
Premature birth,	1	
Improper development,	1	
Retained too long,	1	
Septacaemia,	2	
Goitre,	1	
Eclampsia,	1	
<hr/>		
Total,		21

Infectious Diseases.

Typhoid fever,	3	
Puerperal septicemia,	1	
Scarlet fever,	1	
Erysipelas,	1	
<hr/>		
Total,		6

Accidental.

Burned,	1
Mills,	1
Railroad,	3
Street car,	1
Shock from bridge accident,	1
Asphyxia,	1
<hr/>	
Total,	8

Indefinite.

Heart failure,	3
Dropsy,	2
<hr/>	
Total,	5
Unknown (diseases not given),	1
Suicides,	2
<hr/>	
Grand total,	118
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The death rate, based upon an estimated population of 16,000 is 7.37 per thousand; less accidents, suicides and still born, 6.25 per thousand; less non-resident deaths, 5.5 per thousand.

Of the deaths from the various diseases for the year, there is a decrease of 71 from the year 1901.

Summary of Deaths.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Sex.													
Male,	8	9	10	7	10	2	8	8	4	4	8	6	74
Female,	7	6	3	2	4	1	4	5	2	1	2	7	44
Total,	15	15	13	9	4	3	12	13	6	5	10	13	118
Color.													
White,	15	14	13	9	4	3	12	12	5	5	10	13	115
Black,	1	1						1	1				3
Total,	15	15	13	9	4	3	12	13	6	5	10	13	118

Summary of Deaths—Continued.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Social Condition.													
Married,	7			5	2	1	5	5	2	1	5	7	51
Single,	5			5	2		6	7	4	4	4	2	46
Widows,	2		2			1						2	12
Widowers,						1					1	1	4
Not stated,	1			1				1				1	5
Total,	15	15	12	9	4	3	12	13	6	5	10	13	118
Age.													
Under 1 year,	2			1	1			4	1		1		20
From 1 to 4 years,	1			1				1	1	1			7
From 5 to 9 years,								1			2		4
From 10 to 19 years,					1						1	2	5
From 20 to 29 years,	4			1						2			9
From 30 to 39 years,				1	1			1		1		2	11
From 40 to 49 years,				2		1					2	1	6
From 50 to 59 years,	3			1				2	1			2	16
From 60 to 69 years,	2			1	1			2	2	1	2	3	13
From 70 to 79 years,	3			1		1	2	2	1		1	2	17
From 80 to 89 years,						1					1	1	4
From 90 to 99 years,													1
Total,	15	15	13	9	4	3	12	1	6	5	10	13	118

Births reported during the year were as follows:

	Hospital.	Total.
January,		31
February,		28
March,	1	31
April,	1	26
May,		28
June,		13
July,		33
August,	1	36
September,		33
October,		29
November,		28
December,		19
Totals,	3	340

Summary of Births.

Males—		
White,	192	
Black,	3	
	<hr/>	195
Females—		
White,	145	
Black, .....	..
	<hr/>	145
Total,	<hr/>	<hr/> 340 <hr/>

Of the above total of 340 births for the year there were two pairs of twins born.

Nuisances.

There have been abated, from April 15 to December 31, 1902, 615 nuisances.

Report of the Inspector of Dairies.

Nine hundred and eleven cows have been subjected to a physical examination and 110 certificates of inspection issued. The milk from two cows was condemned as being unfit for consumption, and the owners prohibited from shipping the milk to this market. A few others were quarantined for temporary ailments. One herd which had been tested with tuberculin for a series of years by authority of the State Live Stock Sanitary Board was retested this year, and is now found to be free from tuberculosis.

Orwigsburg, Schuylkill County.

Contagious diseases reported. Houses placarded and quarantined. An epidemic of 45 cases of scarlet fever resulted in 5 deaths, but otherwise the health of the borough has been good. Registration has been partially enforced, including that of vaccination of school children.

Salary of secretary, \$25.00 per month.

Salary of health officer, \$10.00 per month.

Palo Alto, Schuylkill County.

Contagious diseases reported. Houses placarded and quarantined. Although small-pox has prevailed in adjacent places there have been no cases in this borough, which is attributed to the fact that the vaccination laws were cheerfully complied with by the people. The board of health made the vaccination of school children compulsory, and also the fumigation of schools and trolley cars with formaldehyde generators.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$60.00 per annum.

Parkersburg, Chester County.

Contagious diseases reported. Houses placarded and quarantined. The borough has had very few such cases during the year. Registration is not enforced, excepting that of vaccination of school children.

Salary of secretary, \$10.00 per annum.

Health officer, 50 cents for each house placarded.

Patton, Cambria County.

Contagious diseases reported. Houses placarded and quarantined. Twenty-four cases of diphtheria resulted in eight deaths, and measles and whooping cough have been epidemic. The town has been improved by additions to the sewerage system. Partial registration, including that of vaccination of school children.

Salary of secretary, \$12.00.

Philadelphia, Philadelphia County.

In the year 1901, one thousand one hundred and fifty-nine (1,159) cases of small-pox occurred. In 1902 there were reported one thousand three hundred and forty-two (1,342) cases, or one hundred and eighty-three (183) more than in 1901. The deaths from this disease were two hundred and thirty-one (231), a death rate of 17.20 per cent. In 1901 the number of deaths caused by this disease was one hundred and fifty-one (151), a death rate of 13.03 per cent.

There were reported two thousand four hundred and forty-four (2,444) cases of diphtheria, a decrease of eleven hundred and thirty-four (1,134) from the number reported last year.

The number of cases of scarlet fever reported was three thousand one hundred and sixty-one (3,161), a decrease of five hundred and ninety-five (595) from the number reported in 1901.

Five thousand and six (5,006) cases of typhoid fever were reported, an increase of thirteen hundred and thirty-seven (1,337) over the preceding year.

Thus it will be seen that while there have been fewer cases of diphtheria and scarlet fever, there have been an increased number of cases of typhoid fever.

The deaths from diphtheria were four hundred and thirty-five (435), a decrease of ninety (90) from the preceding year. The death rate, however, was slightly higher, being 17.79 per cent., while in 1901 it was 14.63 per cent., a remarkably low rate.

Scarlet fever caused one hundred and forty-three (143) deaths, or seventy-six (76) more than last year.

The number of deaths from typhoid fever was five hundred and eighty-eight (588), an increase of one hundred and forty-four (144) over the preceding year. The death rate was practically the same as 1901, being 11.75 per cent., while in 1901 it was 12.10 per cent.

Consumption caused two thousand eight hundred and forty-five (2,845) deaths, and inflammation of the lungs caused two thousand nine hundred and seventy-six (2,976) deaths. These two diseases caused over one-fifth of the total number of deaths.

By resolution of the board of March 12, 1901, tuberculosis (consumption of the lungs) was placed on the list of diseases required to be reported by physicians. They have not, as yet, however, been notified to report cases of this disease. Numerous requests for disinfection after death from tuberculosis have been received and in all such cases the apartments occupied by the deceased are thoroughly disinfected. For several years precautionary circulars have been distributed where cases of this disease have occurred, and thus the community is becoming alive to the serious nature of the affection, and persons coming in contact with the disease are more careful.

Antitoxin is still distributed to all physicians who make application for it for use among such of their patients as are without sufficient means to purchase the remedy. The antitoxin is supplied by the division of bacteriology to all station houses, and the supply is kept fresh by constant renewal.

In connection with the work of this division it is a pleasure to note that the services rendered continue to meet with the appreciation of both the board and of the physicians in Philadelphia. For

the past four years the demand for the diphtheria antitoxin made in the laboratory has been regularly growing, and for the year 1902 was almost double that of what it was for the year 1899. Through the improved facilities that have been placed at the disposal of the laboratory there is now supplied as antitoxin of much stronger grade than that hitherto made by us.

Another departure of the work of the laboratory that has given a great deal of satisfaction is the assistance rendered to the chief milk inspector. Two years ago this work was begun in an experimental way with the view of deciding how much practical assistance could be rendered to the division of milk inspection, and it is a pleasure to note that the assistance rendered is regarded as of so much importance that the work for the past year has assumed the high proportion noted in the report of the director of the laboratory. For instance of the 1,840 examinations of milk made during the year 1902, 242 of them revealed the presence of disease-producing bacteria, and in every case enabled the chief inspector of milk to isolate from the suspicious herds the cows suffering from disease of the udder.

During the year small-pox, which assumed great proportions during the latter part of last year, was still present, although it disappeared almost entirely during the summer months. While the death rate was slightly higher than in 1901, the disease is not nearly so fatal as it was many years ago. All means known to sanitary science have been used to stamp out the disease; nevertheless, it persists in remaining.

As soon as a case of small-pox is reported, the patient is removed to the municipal hospital, the dwelling place thoroughly disinfected, all infected articles removed to the public disinfecting plant and destroyed, all unvaccinated persons who are known to have been in contact with the patient immediately vaccinated and such other measures as suggest themselves in each particular immediately carried out. If the patient be a child attending school, the school is immediately closed and not re-opened until the bureau has removed from it all danger of infection. All children of the afflicted family are prohibited from attending school. There are, of course, thousands of persons in the city who are still unvaccinated, despite the opportunities given to vaccinate all unvaccinated persons. Vaccination, recently successfully performed, is an absolute protection against small-pox.

The division of contagious diseases has been extremely busy during the year. As soon as a case of contagious or infectious disease is reported, a medical inspector visits the patient's dwelling place, inspects the premises, places a placard thereon, and reports such suggestions as he deemed necessary to prevent the further spread

of the disease. He visits the place during the period of illness and again as soon as the case is reported recovered or dead. In either case, he orders disinfection to be performed and bedding and other infected articles that, in his judgment, cannot be properly disinfected on the premises, removed to the public disinfecting station for disinfection. All children of the patient's family are restrained (by act of Assembly, 1895) from attending school until thirty days after disinfection of the premises. In cases where death occurred from tuberculosis, a medical inspector visits the dwelling place of the decedent and endeavors to have disinfection done, and in most cases permission to do so is obtained.

Public Schools.

The disinfection of public schools has been continued during the past year, and where children from infected houses have been in attendance before the character of the sickness was known, a thorough disinfection of the class rooms in which such children have assembled has been promptly done. The following instructions to janitors have been distributed to the schools, and it is believed that the information thus furnished has been beneficial in a sanitary way:

Instructions to Janitors in Reference to Disinfection.

"A supply of disinfectants will be left at the school, and renewed from time to time upon receipt of a request addressed to the bureau of health. These disinfectants are to be added to the water with which the floors are scrubbed, as well as to that used in cleaning the desks, hand-rails, or other woodwork, and for all purposes of ordinary disinfection or deodorization.

"Official fumigation by formaldehyde gas will be performed by the disinfecting corps of the bureau upon receipt of notice that danger of infection exists, and also at such times as may be convenient. Upon the completion of this fumigation it will be necessary to keep the building closed for eight hours, after which the rooms may be ventilated and prepared for occupancy."

Milk Inspection.

The number of inspections aggregated forty-five thousand nine hundred and seventy-six (45,976); the number of quarts inspected being one million four hundred and sixty thousand four hundred and seventy-three (1,460,473). Of this quantity seventeen thousand one hundred and seven quarts (17,107), or 1.20 per centum were condemned for adulteration with water, and three hundred and eight (308) quarts for containing formaldehyde, boric acid, etc.

In compliance with the resolution of the board of July 1, 1902, careful and systematic examinations were made of the supply, to condemn and prevent the sale of all milk found containing formaldehyde, boric acid or any other chemical preparation or so-called "preservative." The result of the labor in this direction is that out of four hundred samples examined in the months of July and August, five were found to contain formaldehyde and one boric acid.

Bacteriological Examination of Milk.

Daily bacteriological examinations of the milk supplied for use in this city show the necessity for legislation governing the exclusion of milk from cows within a certain time before and after calving. Careful attention should likewise be given to excluding milk of cows suffering with sore and inflamed udders and teats. The frequency with which pus cells are found in milk proves this. One cow so affected may contaminate the whole milking.

Of the one thousand eight hundred and thirty (1,830) samples collected, two hundred and thirty-seven (237) were found to contain pus cells and streptococci, organisms indicating inflammation of the mammary glands. In all these cases, immediate notice was mailed to the dairy farmers, directing examination of the herds by a veterinarian, and the exclusion of the milk of affected cows from that of sound animals, also a verbal notice by the district inspector on the consignee or dealer, not to sell such contaminated milk until the cause no longer existed, as certified by the veterinarian.

The following summary will show the work in detail:

Number of inspections,	45,976
Number of quarts inspected,	1,460,473
Number of quarts condemned,	17,107
Number of samples collected,	2,289
Number of samples collected for bacteriological examinations,	1,830
Number of samples analyzed for adulterations,	459
Number of quarts adulterated (water),	16,793
Number of quarts containing preservatives,	308
Number of quarts colored,	6
Number of cautionary notices,	197
Percentage of adulterated milk,	1.20
Percentage of skimmed milk,	
Percentage of contaminated milk containing pus cells, etc.,	13.00

Monthly Condemnations.

Months.	Per cent.	Months.	Per cent.
January,	0.42	July,	1.43
February,	0.30	August,	1.75
March,	0.65	September,	0.57
April,	1.45	October,	0.63
May,	1.65	November,	0.61
June,	2.47	December,	0.15

Meat Inspector.

There were inspected during the year 137,466 head of cattle on the hoof, 83,611 slaughtered cattle, 65,656 calves, of which number 1,535 were condemned. There were 6,323 visits made to slaughter houses, 5,446 visits to stores and 236 to markets. It is estimated that two tons of condemned meat, fish, hogs, poultry and game were destroyed at the fertilizing works.

Filtration Work.

This brief outline will serve to call attention to the comparatively short period during which the work of the improvement has been under way. Less than three years have elapsed since an engineering corps was organized for the improvement, extension and filtration of the water supply, and it is a little more than two years ago since the testing station was placed in operation. During this brief period a prodigious amount of work has been accomplished. A brief resume of the work of the filtration corps will be of interest.

The improvement of the water supply of Philadelphia embraces three distinct propositions.

First. The filtration of the entire water supply, assumed in the near future, at 300,000,000 gallons per day of 24 hours.

Second. The transfer of source of water in the districts now supplied from the Fairmount, Corinthian, East Park and Queen Lane reservoirs from the Schuylkill to the Delaware river.

Third. An adjustment of the water services of all but that portion of the city lying west of the Schuylkill river, comprising the Twenty-fourth, Twenty-seventh, Thirty-fourth and Fortieth wards, to adapt them to an economical operation of the Upper and Lower Roxborough and Torresdale filters.

During 1900 a testing station was built and equipped at the Spring

Garden pumping station for the purpose of studying the Schuylkill river water and the effect on same by slow sand filtration, also the qualities of various local sands and other filtering materials for preliminary filtration.

Plans were completed during the same year for the Lower Roxborough filter station, and good progress was made on the plans for the Upper Roxborough, Belmont and Torresdale filter stations, the Torresdale conduit and the Lardner's Point pumping station. No contracts for the filter stations were awarded during 1900.

During the year 1901 nineteen contracts for work and materials were awarded, the sum limit of same amounting to \$11,647,800. Work was started on all of these contracts and a very large percentage of the work on the Lower Roxborough filters was completed during the year. The work accomplished on the other filters and reservoirs consisted chiefly of grading preparatory to the laying of puddle and concrete.

During the year 1902 the Lower Roxborough filter station has been completed and is now in very successful operation. The Upper Roxborough filter station has been completed with the exception of some minor details. Work on the Belmont and Torresdale filter stations, the Oak Lane reservoir, the Torresdale conduit, Lardner's Point Station No. 2 and the pipe distribution system, as well as the minor contracts, has progressed favorably.

The first filter at Lower Roxborough was started in service on August 2 of last year, and your attention is called to the rapidity with which all the filters at this station have gotten into actual satisfactory service. Within ninety days of placing the filters in operation the effluent showed a turbidity of zero by the silica standard, and rarely has it been in excess of 3; and the bacterial content has very frequently been below 25 colonies per cubic centimeter. This is due to the extreme care in the selection and placing of the filter gravel, sand and underdrains. The operation of these filters indicates that the yield of the filters between scrapings is much greater than has been experienced abroad, and that with preparation of water by preliminary filtration it is expected that the average yield of the filters will be double that of those abroad. This increased yield will reduce that cost of production below the estimate of the board of experts, while at the same time, from a hygienic standpoint, will be above criticism and superior to the effluent of the plain sand filters abroad, which operate without preparation of the water either by long sedimentation or preliminary filtration.

During the year 1902 four (4) contracts were awarded, the sum limit of the same amounting to \$668,600.

To illustrate what has been accomplished during the past two years, the following figures might be quoted:

Total cubic yards of material excavated,	1,642,320
Embankments constructed (cubic yards),	523,791
Clay puddle laid (cubic yards),	88,938
Concrete masonry (cubic yards),	92,350
Cast-iron water pipe laid (tons),	28,756
Granolithic pavement (square yards),	11,021
Concrete curbing (feet),	5,456

Municipal Hospital.

At the beginning of the year the epidemic of small-pox which began at an early period of the previous fall was at its height. The epidemic continued unabated throughout the winter, but commenced to wane during the spring months. Although there was quite a large number of cases of small-pox in the city during the summer months, yet by that time the force of the epidemic had been spent.

The following table shows the number of patients remaining in the hospital January 1, 1902, from the previous year, the number admitted during the year, the total number treated, the number discharged, the number that died and the number remaining at the close of the year:

Table I.

Remaining Jan. 1, 1902.	Admitted.	Total Num- ber Treated.	Discharged.	Died.	Remaining Dec. 31, 1902.
447	2,506	2,953	2,326	432	195

Note. Thirty-eight (38) of the deaths recorded in this table occurred among the patients remaining January 1, 1902.

The following table shows the number of admissions and deaths from all diseases during each month of the year:

Table II.

Months.	Cases.	Deaths.
January,	510	97
February,	369	71
March,	289	49
April,	211	29
May,	206	30
June,	186	35
July,	128	22
August,	94	10
September,	79	6
October,	133	13
November,	143	12
December,	153	16
Total,	2,506	395

Note.—One (1) of the deaths among the December cases occurred in January, 1903.

The following table shows the number of admissions and deaths during the year classified according to the disease, the sex and the color of the patients. It also shows the same classification of the patients remaining over from the previous year:

Table III.

Diseases.	Admitted.	Sex.		Color.		Died.	Remarks.
		Male.	Female.	White.	Black.		
Diphtheria,	601	285	316	567	34	136	
Scarlatina,	673	337	336	657	16	56	
Tonsillitis,	29	14	15	26	3		Sent as diphtheria.
Pseudo-diphtheria,	19	9	10	17	2		Sent as diphtheria.
No disease,	67	15	52	63	4		
Varicella,	620	385	235	491	129	173	
Varicella,	416	272	144	394	22		
Varicella,	4	3	1	2	2		Sent as small-pox.
Pneumonia,	14	10	4	13	1	11	
Measles,	41	30	11	40	1	9	
Syphilis,	3	1	2	3			Sent as small-pox.
Erysipelas,	1		1	1		1	Followed small-pox.
Erythema,	2	1	1	2			Sent as scarlatina.
Acne,	2	2		2			Sent as small-pox.
Catarrhal enteritis,	1	1			1	1	Came with mother, who had small-pox.
Marasmus,	1	1			1	1	Came with mother, who had small-pox.
Stomatitis,	2	1	1	2		1	Sent as diphtheria.
Laryngitis,	1		1	1			Sent as diphtheria.
Pharyngitis,	1		1	1			Sent as diphtheria.
Adenitis,	1	1		1			Followed measles.
Pustulo bullous,	1		1	1			Sent as small-pox.
Tuberculosis,	4	1	3	4			Followed some other disease.
Sublingual abscess,	1	1		1		4	Sent as diphtheria.
Debility following premature birth,	1	1		1		1	
Total,	2,506	1,371	1,135	2,290	216	394	
Remaining January 1, 1902.							
Diphtheria,	71	34	37	71		9	

Scarlatina,	116	60	56	110	6	8
Varicella,	154	94	60	123	31	18
Variceloid,	96	66	30	91	5	2
Leprosy,	1	.....	1	1	.....	1
Acne,	2	1	1	2	.....	.....
No disease,	7	3	4	6	1	.....
Grand total,	2,953	1,629	1,324	2,694	259	432

The following table shows the cases of small-pox classified as to variola and varioloid, showing the number of admissions, the deaths and the death rate from each disease:

Table IX.

Disease.	Cases.	Deaths.	PerCent.
Variola,	620	173	27.09
Varioloid,	416		
Total,	1,036	173	16.69

The following table shows the small-pox patients classified as to age:

Table X.

Age Periods.	Cases.	Deaths.	Per Cent.
Under 1 year,	29	16	55.17
1 to 5 years,	82	21	25.06
5 to 10 years,	61	10	16.55
10 to 15 years,	29	5	17.24
15 to 25 years,	212	32	15.09
25 years and upwards,	623	89	14.28
Totals,	1,036	173	16.69

The following table shows the small-pox patients classified as to color:

Table XI.

Color.	Cases.	Deaths.	Per Cent.
White,	885	139	15.71
Black,	151	34	21.85
Total,	1,036	173	16.69

The following table shows the small-pox patients classified as to sex:

Table XII.

Sex.	Cases.	Deaths.	Per Cent.
Male,	657	115	17.5
Female,	379	58	10.08
Total,	1,036	173	16.69

The following table shows the unvaccinated small-pox patients classified as to color:

Table XIII.

Color.	Cases.	Deaths.	Per Cent.
White, unvaccinated,	384	105	27.34
Black, unvaccinated,	114	32	28.07
Total,	498	37	27.51

The following table shows the small-pox patients classified into the vaccinated and the unvaccinated, showing the vaccinated patients grouped according to the character of the vaccination scars, and the deaths and death rate of each classification:

Table XIV.

	Cases.	Deaths.	Per Cent.
Vaccinated in infancy (good mark),	200	7	3.5
Vaccinated in infancy (fair mark),	150	9	6
Vaccinated in infancy (poor mark),	119	12	10.08
	469	28	5.97
Unvaccinated cases,	498	137	27.51
Vaccinated after exposure,	63	8	11.59
Total,	1,036	173	16.69

The following table shows the small-pox patients that were vaccinated after exposure classified as to the length of time which elapsed from the performance of vaccination until the appearance of the small-pox eruption:

Table XV.

Vaccinated seven days or less prior to the appearance of the eruption.			Vaccinated more than seven days prior to the appearance of the eruption.		
Cases.	Deaths.	Per cent.	Cases.	Deaths.	Per cent.
10	3	30.00	59	5	8.47

Statistical Record of the Cases of Small-pox Admitted to the Hospital during the Epidemic of 1901-2.

At the time the annual report of the hospital for 1901 was submitted the epidemic of small-pox then prevailing was at its height. Since then the epidemic has abated, and it is believed that a statistical record of the entire number of cases would prove interesting and instructing. The tables which follow comprise the total number of cases (2,013) admitted to the hospital in 1901-2.

The following table shows the admission by months of small-pox patients to the hospital in the year 1901-2, showing the rise, acme and decline of the epidemic:

Table XVI.

1901.			1902.		
Months.	Cases.	Deaths.	Months.	Cases.	Deaths.
January,			January,	311	62
February,	1		February,	241	50
March,	4	2	March,	145	18
April,	12	2	April,	80	8
May,	16	2	May,	74	12
June,	7	2	June,	51	10
July,	10	2	July,	38	5
August,	12	11	August,	12	1
September,	118	14	September,	13	
October,	138	41	October,	9	
November,	221	50	November,	15	4
December,	194	90	December,	47	2
Total,	977	188	Total,	1,036	173

The following table shows the cases of small-pox admitted in 1901-2, classified as to variola and varioloid, with the deaths and death rate from each form of disease:

Table XVII.

Disease.	Cases.	Deaths.	Per Cent.
Variola,	1,207	356	29.49
Varioloid,	806	3	.37
Total,	2,013	359	17.85

The following table shows the small-pox patients admitted in 1901-2, classified as to sex:

Table XVIII.

Sex.	Cases.	Deaths.	Per Cent..
Male,	1,235	224	18.13
Female,	778	135	17.35
Total,	2,013	359	17.85

The following table shows the small-pox patients admitted in 1901-2, classified as to color:

Table XIX.

Color.	Cases.	Deaths.	Per Cent.
White,	1,754	293	16.7
Black,	259	66	25.48
Total,	2,013	359	17.85

The following table shows the unvaccinated small-pox patients admitted in 1901-2, classified as to color:

Table XX.

Color.	Cases.	Deaths.	Per Cent.
White (unvaccinated),	768	216	28.12
Black (unvaccinated),	195	59	30.25
Total,	963	275	28.55

The following table shows the small-pox patients admitted in 1901-2 classified as to vaccinal conditions:

Table XXI.

	Cases.	Deaths.	Per Cent.
Vaccinated in infancy (good mark),	464	16	3.44
Vaccinated in infancy (fair mark),	232	18	7.75
Vaccinated in infancy (poor mark),	219	27	12.33
Post vaccinal cases,	915	61	6.66
Unvaccinated cases,	963	275	28.55
Vaccinated after exposure,	135	23	17.03
Total,	2,013	359	17.85

The following table shows the small-pox patients admitted in 1901-2, classified as to nationality, showing the vaccinal conditions, deaths and the death rates under each nationality:

Table XXII.

	Cases.	Deaths.	Per Cent.
United States:			
Unvaccinated,	919	262	28.5
Vaccinated in infancy—good mark,	281	4	1.42
Vaccinated in infancy—fair mark,	149	16	10.06
Vaccinated in infancy—poor mark,	156	21	13.46
Total post-vaccinal cases,	586	40	6.82
Germany:			
Unvaccinated,	10	3	30.00
Vaccinated in infancy—good mark,	56	3	5.35
Vaccinated in infancy—fair mark,	27	1	3.7
Vaccinated in infancy—poor mark,	19	2	10.52
Total post-vaccinal cases,	102	6	5.88
Ireland:			
Unvaccinated,	11	3	27.27
Vaccinated in infancy—good mark,	52	3	5.76
Vaccinated in infancy—fair mark,	22	1	4.55
Vaccinated in infancy—poor mark,	17	1	5.88
Total post-vaccinal cases,	91	4	4.39
Other nationality:			
Unvaccinated,	23	7	30.43
Vaccinated in infancy—good mark,	75	6	8
Vaccinated in infancy—fair mark,	34	1	2.94
Vaccinated in infancy—poor mark,	27	3	11.11
Total post-vaccinal cases,	136	10	7.35

The following table shows the small-pox patients admitted in 1901-2 classified as to the number and quality of the vaccination scars borne by each patient:

Table XXIII.

	Cases.	Deaths.	Per Cent.
Unvaccinated cases,	963	275	28.55
Vaccinated seven days or less before eruption appeared,	28	9	32.14
Vaccinated longer than seven days before eruption appeared,	107	14	13.08
Vaccinated in infancy—one good mark,	278	10	3.59
Vaccinated in infancy—one fair mark,	157	15	9.55
Vaccinated in infancy—one poor mark,	173	22	12.71
Total showing one mark,	608	47	7.73
Vaccinated in infancy—two good marks,	113	5	4.42
Vaccinated in infancy—two fair marks,	47	3	6.38
Vaccinated in infancy—two poor marks,	32	3	9.37
Total showing two marks,	192	11	5.72
Vaccinated in infancy—three good marks,	36	1	2.77
Vaccinated in infancy—three fair marks,	15		
Vaccinated in infancy—three poor marks,	6	1	16.66
Total showing three marks,	57	2	3.5
Vaccinated in infancy—four or more good marks,	37		
Vaccinated in infancy—four or more fair marks,	13		
Vaccinated in infancy—four or more poor marks,	8	1	12.5
Total showing four or more marks,	58	1	1.73

The following table shows the small-pox patients admitted in 1901-2 classified as to age periods, showing the mortality in the different age periods:

Table XXIV.

	Cases.	Deaths.	Per Cent.
Under 1 year:			
Unvaccinated,	45	26	57.77
Vaccinated,			
1 to 7 years:			
Unvaccinated,	209	59	28.23
Vaccinated in infancy (good scar),			
Vaccinated in infancy (fair scar),	1		
Vaccinated in infancy (poor scar),	1		
Total post-vaccinal cases,	2		
7 to 14 years:			
Unvaccinated,	78	15	19.23
Vaccinated in infancy (good scar),	6		
Vaccinated in infancy (fair scar),	1		
Vaccinated in infancy (poor scar),	5		
Total post-vaccinal cases,	12		
14 years and upwards:			
Unvaccinated,	631	175	27.73
Vaccinated in infancy (good scar),	458	16	3.49
Vaccinated in infancy (fair scar),	230	18	7.82
Vaccinated in infancy (poor scar),	213	27	12.67
Total post-vaccinal cases,	901	61	6.77

The following table shows the day of the variolous eruption on which death resulted, illustrating the most critical period of the disease:

Table XXV.

		Deaths.
First week,	First day of the eruption,	
	Second day of the eruption,	
	Third day of the eruption,	4
	Fourth day of the eruption,	6
	Fifth day of the eruption,	18
	Sixth day of the eruption,	19
	Seventh day of the eruption,	23
		70
Second week,	Eighth day of the eruption,	25
	Ninth day of the eruption,	30
	Tenth day of the eruption,	35
	Eleventh day of the eruption,	39
	Twelfth day of the eruption,	28
	Thirteenth day of the eruption,	23
	Fourteenth day of the eruption,	10
		190
Third week,	Fifteenth day of the eruption,	12
	Sixteenth day of the eruption,	15
	Seventeenth day of the eruption,	5
	Eighteenth day of the eruption,	5
	Nineteenth day of the eruption,	3
	Twentieth day of the eruption,	5
	Twenty-first day of the eruption,	6
		51
Fourth week,	Twenty-second day of the eruption,	5
	Twenty-third day of the eruption,	5
	Twenty-fourth day of the eruption,	4
	Twenty-fifth day of the eruption,	3
	Twenty-sixth day of the eruption,	3
	Twenty-seventh day of the eruption,	1
	Twenty-eighth day of the eruption,	2
		23
Fifth week and after,	Twenty-ninth day of the eruption,	2
	Thirtieth day of the eruption,	1
	Thirty-first day of the eruption,	2
	Thirty-second day of the eruption,	3
	Thirty-third day of the eruption,	1
	Thirty-fourth day of the eruption,	2
	Thirty-fifth day of the eruption,	1
	Thirty-sixth day of the eruption,	2
	Thirty-seventh day of the eruption,	1
	Thirty-ninth day of the eruption,	1
	Forty-fourth day of the eruption,	2
		19

After many years of agitation on the part of residents of the Twenty-eighth ward, a new site has been found and its purchase authorized, for the location of the Municipal Hospital, viz., the MacAllister farm, in the Thirty-third ward. This property is advantageously located, so far as environment is concerned, as well as accessibility. It is sufficiently large to allow of the location of separate buildings for the various types of contagious diseases, and will permit of the very best modern treatment.

Bacteriology, Pathology and Disinfection.

Diphtheria.—For the twelve months ending December 31, 1902, there were examined in this division in all five thousand six hundred and forty-seven (5,647) cultures from cases of diphtheria and other suspicious conditions of the upper air passages, a decrease of one thousand two hundred and forty-five (1,245) cases over the number made in the preceding year. Of the five thousand six hundred and forty-seven (5,647) cultures examined, two thousand six hundred and fifty-nine (2,659) were primary and two thousand nine hundred and eighty-eight (2,988) secondary. Of the two thousand six hundred and fifty-nine (2,659) primary examinations, nine hundred and eighty-nine (989) proved to contain living diphtheria bacilli, while from one thousand five hundred and fourteen (1,514) this organism was absent, and on eighteen (18) cultures it was impossible to give a trustworthy opinion owing to the fact that they came in unsuitable condition.

The following exhibit serves to give an idea of the progress of this department of work for the five years ending with December 31, 1902:

Cultures examined for diphtheria bacilli in 1898,	5,536
Cultures examined for diphtheria bacilli in 1899,	6,073
Cultures examined for diphtheria bacilli in 1900,	7,743
Cultures examined for diphtheria bacilli in 1901,	6,892
Cultures examined for diphtheria bacilli in 1902,	5,647

Diphtheria Antitoxin.—This department of work has continued to serve a useful purpose. The demand made for the antitoxin manufactured in this laboratory, though varying in degree from year to year, still continues, and there is every assurance from physicians in the city who are using it that this article is giving satisfaction. Through special efforts the quality of antitoxin has been so improved that the prophylactic and curative doses of this serum are furnished in much smaller volume than hitherto. The output for the year may be briefly stated as follows:

During the period covered by this report five thousand seven hundred and seventy-one (5,771) doses of this antitoxin have been used, of the average strength of three hundred and fifty (350) units per cubic centimeter. This represents three hundred and ninety-seven (397) doses distributed more than last year. As hitherto, a constant

supply of fresh antitoxin has been kept at the police stations throughout the city and at the end of each period of two months all old antitoxin left at the station houses is returned to the laboratory and a fresh supply obtained. Through improvements in the facilities for making this article it is possible to keep on hand always a sufficiently large supply to meet any emergency that may arise, and an effort is being made in part successful, to induce the general use of antitoxin as a prophylactic as well as a curative agent. It is impossible at this time to say, however, with what degree of success this effort is meeting. The following exhibit illustrates the annual distribution of antitoxin from this laboratory since 1896:

In 1896 there were supplied 900 doses.
In 1897 there were supplied 2,334 doses.
In 1898 there were supplied 3,367 doses.
In 1899 there were supplied 2,976 doses.
In 1900 there were supplied 5,233 doses.
In 1901 there were supplied 5,374 doses.
In 1902 there were supplied 5,771 doses.

Since the year 1900 the number of doses in the above tabulation represents only those known to have been actually used.

Typhoid Fever.—The statistics for this branch of work for the year are as follows:

Total number of blood specimens examined: Three thousand seven hundred and sixty-three (3,763).

Whole number of suspicious cases represented by the preceding number of specimens, three thousand one hundred and eighty-six (3,186).

Number of cases from which the final clinical diagnosis was obtained, two thousand two hundred and forty-two (2,242).

Actual number of cases in which the laboratory and the clinical diagnosis did not correspond, one hundred and eighty-seven (187).

The foregoing disagreement expressed in terms of percentage is eight and three-tenths (8.) per cent.

In this department of the work it is of the greatest importance that the statistics be not only full but at the same time accurate. Attention must again be called to the difficulties experienced in getting from physicians a statement as to the subsequent course of those cases from which blood samples are sent to the laboratory. It is manifest that unless this bureau gets from the doctors for whom the work is done a statement as to the real nature of the disease it is impossible to know whether the laboratory examination corresponds with the clinical examination. Physicians can aid this department very much by promptly notifying the laboratory as to whether its reports agree with the clinical findings in the cases examined or not.

The following exhibit shows the annual work of this department for the past five years:

For the year 1897—1,932 specimens from 1,557 cases.
For the year 1898—5,293 specimens from 4,597 cases.*
For the year 1899—5,350 specimens from 4,483 cases.
For the year 1900—3,205 specimens from 2,745 cases.
For the year 1901—2,978 specimens from 2,512 cases.
For the year 1902—3,763 specimens from 3,186 cases.

Water analysis.—Since the establishment of the experiment station in connection with the filtration plant the work for the bureau of water has been practically discontinued.

From outside individuals, that is citizens of Philadelphia and the vicinity, the bureau has, however, been called upon from time to time during the year to make examinations of suspicious waters. These represent the total of sixty-four (64) bacteriological analyses.

Milk.—During the twelve months just ending the work in this department has been the routine examination by microscopic and bacteriological methods of samples of milk supplied by the chief milk inspector. The object of these examinations has been the discovery of milks unfit for human consumption, and the results of these examinations have enabled the inspector in practically every case to isolate from the suspicious herds those cows from which unsuitable milk was being obtained.

During the year there have been made in all one thousand eight hundred and forty (1,840) examinations of milk, in two hundred and forty-two (242) of which disease-producing bacteria were found.

Miscellaneous.—Under this heading eight hundred and ninety-six (896) samples of sputum and one hundred and eighty-seven (187) samples of urine have been examined for physicians of the city free of charge.

Disinfection.

Auxiliary Disinfectors.

The initial step in this direction consisted in the enlargement of the small corps of regular assistant disinfectors by the addition of thirty-six (36) auxiliary disinfectors to be assigned to such duties as might be considered wisest and best for the improvement of the general sanitary condition of the city, with especial reference to those locations wherein small-pox was most prevalent, and school houses, theatres, churches and other places of public assembly through the medium of which contagion would most naturally disseminate.

*1,450 of these cases occurred among soldiers returning from Spanish-American War.

School Disinfection.

These additional operators were provided with two hundred and twenty-five (225) Kuhn formaldehyde generators, as well as with hand sprays and other devices for the distribution of formaline, and the systematic disinfection of the public and parochial schools throughout the entire city was immediately begun upon the closing of those institutions for the Christmas holidays, and prosecuted with vigor during the entire school period and part of the summer vacation, until such time, in fact, as the danger of a second outbreak of the disease was supposed to have been passed, when it was deemed superfluous to continue the work upon resumption of the school sessions in September.

Some idea of the magnitude of this undertaking may be formed when it is stated that nine hundred and sixty (960) disinfections of school buildings were recorded during this period, that four thousand three hundred and thirty (4,330) gallons of wood alcohol were consumed in the work, and that it was seldom necessary to dismiss the classes for the purpose of disinfecting the rooms, arrangements having been perfected whereby the disinfectors arrived at the buildings at the hour of termination of the afternoon session, so that the disinfection, ventilation and reheating of the rooms were all completed prior to the resumption of school duties on the morning following the work of this corps, thereby avoiding panics among the pupils, teachers or parents.

The rapid evolution of nascent formaldehyde gas by the Kuhn generators, the great diffusibility of this gas, its freedom from impurities and the irritating after effects caused by gas generated by other systems, conduced greatly to the success of this particular work, and incidentally aided in facilitating the practice of general disinfection by first gaining the confidence of the school authorities through whom others subsequently became enlightened.

Classification of Operators.

It was manifestly improper to employ the same operators for this and for other varieties of disinfection at one and the same time, and, therefore, the school disinfectors were necessarily unoccupied during a considerable portion of the day, which did much to limit the amount of work performed; but if great care had not been exercised to keep the operators upon small-pox houses from participating in the work done in schools, churches and other buildings of similar nature, it is doubtful if the same results could have been attained, and especially that no dissemination of the disease should have occurred through the operators themselves. It was the aim of those in charge of the disinfectors to keep the operators distinctly separate, and as no complaints of carelessness have been received at this office, and,

so far as our knowledge goes, no spread of disease through this source is on record, the results are eminently satisfactory.

Police officers patrolling the infected districts collected numerous responses, accepting the offer of the department to send disinfectors if desired, and as a result of this canvass of the city, five thousand five hundred and forty-one (5,541) houses were visited by the special corps of disinfectors detailed to this work, and when circumstances permitted, these were fumigated with formaldehyde gas. At times entire rows of houses were covered by such requests, and again a few widely separated premises would demand attention, but in all cases the utmost satisfaction was expressed by those who availed themselves of the service.

The premises immediately adjoining dwellings in which small-pox was known to exist were invariably visited whether requests were made or not, and unless satisfactory reasons could be given they were thoroughly disinfected, thus lessening the danger of contamination from these known centres of infection.

Distribution of Disinfectants.

Not only were the rooms fumigated, but an equally important service was rendered by the gratuitous distribution among the householders of two valuable liquid disinfectants for use in cleansing and disinfecting clothing, utensils, sinks, drains, wells and latrines.

Street Flushing.

As an additional sanitary measure the flushing and disinfection of small streets, courts, alleys, etc., was resumed upon the return of spring weather.

Five men, equipped with several hundred feet of fire hose, brooms and shovels, rendered valuable service in this direction. Many unsanitary districts were put in good condition, and flagrant nuisances reported to the proper officers for abatement.

In some localities the hose men were followed by the distributing tanks, and disinfectants were thrown where they would be of service, in other instances flushing alone sufficed to meet all requirements.

Disinfection where Small-pox Existed.

The treatment of premises manifestly infected and dangerous, as those in which cases of small-pox were quarantined, or those from which patients had been removed to the Municipal Hospital, differed materially from that described as the practice followed as a preventive measure. In all such infected quarters it was deemed advisable to thoroughly saturate with formaline, for which purpose a solution containing 15 per cent. of the gas was sprayed upon the floors and into the atmosphere.

Disinfection for Other Diseases.

During the year there were in all fourteen thousand seven hundred and thirty-one (14,731) disinfections recorded, which arranged according to usual classification appears as follows:

Scarlet fever,	2,778
Diphtheria,	2,351
Small-pox,	2,282
Tuberculosis,	605
Typhoid fever,	25
Measles,	10
Cancer,	5
Unclassified,	174
School houses,	960
Non-infected houses,	5,541
Total,	14,731

Disinfection Station Municipal Hospital.

Showing Articles Received in 1902 Compared with 1901.

Articles Received.	1901.	1902.
Mattresses and beds,	7,591	6,973
Blankets, quilts and shawls,	7,511	8,633
Pillows and bolsters,	15,115	13,968
Carpets and rugs,	729	491
Lots of clothing,	3,271	5,032
Sheets and spreads,	2,869	30,180
Curtains and covers,	283	197
Couches and chairs,	75	65
Bedsteads and cots,	130	27
Miscellaneous lots,	709	13,080
Mall,	16,574	21,417
Total,	64,850	100,012

Showing Work Performed in the Year 1902, Compared with the Years
1900 and 1901.

	1902.	1901.	1900.	Increase over 1901.	Decrease over 1901.
Articles received and disinfected,	97,111	51,509	30,177	45,602	.....
Articles received and destroyed,	2,901	3,350	2,930	.....	449
Calls by wagon,	6,810	7,859	6,985	.....	1,049
Deliveries by wagon,	4,736	5,942	5,130	.....	1,206
Number of disinfecting processes (steam),	504	521	340	.....	17
Number of disinfecting processes (formal- dehyde),	2,727	1,751	365	976	.....

House Drainage.

There were submitted and approved plans for four thousand seven hundred and twenty-three (4,723) new, and seven thousand four hundred and twelve (7,412) old buildings. Total, twelve thousand one hundred and thirty-five (12,135).

There were returned and filed plans for one thousand two hundred and seventy-five (1,275) new and six thousand and sixty-seven (6,067) old buildings. Total, seven thousand three hundred and forty-two (7,342).

Inspection visits new and old buildings of 1902, thirty-five thousand three hundred and sixty-nine (35,369).

Inspection visits for which plans were submitted in 1900 and 1901, eight thousand one hundred and eighty-one (8,181).

Total inspection visits, forty-three thousand five hundred and fifty (43,550).

Registration Division.

The number of deaths (exclusive of still and premature births) amounted to twenty-three thousand eight hundred and forty-seven (23,847), a decrease of two hundred and ninety (290) from 1901.

The death-rate per one thousand (1,000) of population was 17.67, or one death to each 56.60 living persons, "exclusive of coroner's cases, which are largely of an accidental nature, the rate was 15.59."

The number of births collected amounted to twenty-nine thousand eight hundred and forty-one (29,841) being an increase over 1901 of sixteen hundred and twenty-six (1,626), the birth rate for the year being 22.11, or one to each 45.23 living persons.

The number of marriages reported was nine thousand nine hundred and eleven (9,911), being a decrease of one (1) from 1901; the marriage rate was 14.68, or one to each 69.09 living persons.

The population estimated to the middle of the year 1902 was 1,349,712.

Table Showing the Deaths from some of the Principal Causes for each of the Nineteen Years, 1884-1902.

Diseases.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Consumption of lungs, ..	2,801	2,821	2,834	2,800	2,897	2,832	2,780	2,624	2,709	2,671	2,513	2,449	2,514	2,388	2,590	2,818	2,717	2,946	2,846
Cholera Infantum,	775	971	688	891	836	838	918	1,211	1,292	1,217	1,176	1,126	1,126	822	1,099	726	729	507	491
Diphtheria,	680	690	411	416	350	375	528	918	1,485	916	1,047	1,020	862	1,231	998	849	838	525	435
Disease of heart, ..	748	829	769	863	820	820	1,211	1,325	1,400	1,461	1,276	1,424	1,406	1,297	1,398	1,480	1,659	1,539	1,682
Fever, scarlet,	540	375	248	159	235	298	189	341	485	267	153	79	61	252	114	132	163	219	143
Fever, typhoid,	662	610	618	621	783	736	666	684	440	456	370	469	402	*401	639	948	449	414	588
Influenza, .....	.....	.....	.....	.....	.....	.....	147	304	265	139	311	229	79	160	158	280	264	196	61
Inflammation of bronchi,	376	464	441	419	348	337	524	539	618	566	480	559	528	473	435	389	443	380	331
Inflammation of lungs,	1,253	1,519	1,456	1,703	1,548	1,582	2,026	2,111	2,209	2,255	2,142	2,532	2,696	2,723	2,482	2,424	2,959	2,577	2,976
Old age,	795	934	753	795	1,050	850	817	805	856	798	723	538	810	814	953	766	669	572	586

*Of the deaths from typhoid fever 73 were of soldiers brought to the city for treatment.

Mortality of Children under Five Years of Age in Philadelphia from 1871 to 1902, inclusive.

(Still born not included.)

Years.	Deaths under five years.	Percentage of deaths to population.	Percentage of deaths to total mortality.	Total mortality.
1871,	6,262	.88	40.43	15,486
1872,	8,320	1.13	43.82	18,987
1873,	6,260	.83	41.11	15,234
1874,	6,231	.80	40.89	15,238
1875,	7,371	.93	41.39	17,806
1876,	7,632	.92	40.39	18,832
1877,	6,417	.75	40.09	16,004
1878,	5,985	.68	38.01	15,743
1879,	5,524	.61	35.70	15,472
1880,	6,594	.77	38.53	17,111
1881,	7,124	.82	36.50	19,515
1882,	7,254	.81	36.16	20,069
1883,	7,417	.81	37.07	20,006
1884,	7,606	.80	38.08	19,999
1885,	8,188	.86	38.27	21,392
1886,	7,351	.75	36.74	20,045
1887,	8,421	.85	38.77	21,719
1888,	7,268	.72	35.67	20,372
1889,	7,752	.74	37.74	20,536
1890,	7,912	.75	36.40	21,732
1891,	8,479	.79	36.28	23,367
1892,	9,199	.84	37.84	24,305
1893,	8,690	.77	36.73	23,655
1894,	8,431	.74	37.17	22,680
1895,	8,401	.72	35.30	23,797
1896,	8,661	.72	36.11	23,982
1897,	7,605	.62	33.45	22,735
1898,	7,998	.63	33.66	23,790
1899,	7,056	.55	33.72	23,796
1900,	8,078	.62	32.21	25,078
1901,	6,840	.51	28.33	24,137
1902,	6,922	.51	29.03	23,847

Table I—Total Deaths from Typhoid Fever from 1861 to 1902.

Years.	Totals.	Males.	Females.	Boys.	Girls.
1861,	281	148	133	46	53
1862,	654	486	168	112	71
1863,	486	340	146	85	60
1864,	648	408	240	128	83
1865,	772	415	358	105	100
1866,	351	262	179	67	59
1867,	367	186	181	53	58
1868,	395	181	211	60	68
1869,	373	193	180	61	62
1870,	409	228	181	79	72
1871,	313	168	145	49	55
1872,	369	201	168	69	54
1873,	364	210	154	69	50
1874,	491	235	226	78	91
1875,	419	209	210	70	76
1876,	761	392	369	140	126
1877,	542	277	265	96	106
1878,	404	198	206	75	89
1879,	344	182	162	45	54
1880,	498	270	228	79	83
1881,	645	363	282	95	100
1882,	650	372	278	107	78
1883,	579	255	294	71	111
1884,	662	352	310	89	112
1885,	610	322	288	95	118
1886,	618	313	315	85	110
1887,	621	327	294	80	110
1888,	785	457	328	121	112
1889,	736	383	353	114	124
1890,	666	372	294	103	93
1891,	683	386	297	115	106
1892,	440	206	232	53	93
1893,	456	271	185	78	67
1894,	370	198	172	52	60
1895,	469	262	207	72	76
1896,	402	228	174	50	62
1897,	461	207	194	62	86
1898,	639	402	237	96	91
1899,	948	514	434	142	156
1900,	449	269	180	67	78
1901,	444	241	203	90	78
1902,	588	346	242	90	106

Table II—Showing the Number of Deaths from Typhoid Fever in each of the past Forty-one Years, from 1861 to 1902, inclusive, in each Division of Age, with the Adults, Minors and Totals.

Years.	Ages.														Adults.	Minors.	Totals.
	Years.																
	Under 1 year.	1 to 2 years.	2 to 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	90 to 100 years.			
1861.	1	4	23	25	8	37	88	30	36	14	10	5	2	1	183	98	281
1862.	2	7	36	31	18	90	265	90	59	34	19	10	2	1	470	184	654
1863.	1	7	27	33	27	50	147	87	44	30	19	11	3	3	341	146	486
1864.	3	9	24	49	32	140	170	119	64	31	24	11	4	1	427	121	548
1865.	10	7	33	38	35	82	210	120	96	75	49	13	5	5	568	206	773
1866.	6	23	25	35	37	75	69	42	23	30	11	4	1	255	128	381
1867.	4	7	18	25	19	38	88	47	39	33	32	11	5	256	111	367
1868.	1	8	22	25	25	47	87	67	38	26	27	19	3	287	128	395
1869.	3	5	15	28	32	40	119	44	27	24	21	10	5	250	123	373
1870.	6	8	22	22	33	60	106	69	37	28	23	5	1	258	151	409
1871.	2	3	18	24	25	32	97	42	27	19	14	7	2	209	104	313
1872.	6	3	15	23	28	84	97	60	35	26	18	9	1	246	123	369
1873.	6	14	21	26	52	109	54	33	19	14	16	.....	245	119	364
1874.	5	3	16	33	36	76	142	55	40	26	18	10	1	282	69	461
1875.	7	2	20	38	20	58	120	51	33	35	20	13	5	274	145	419
1876.	3	10	30	36	49	148	224	92	55	50	37	23	4	485	276	761
1877.	5	22	40	30	96	142	72	43	41	23	17	2	340	202	542
1878.	2	8	21	32	38	63	103	46	34	24	25	5	3	240	164	404
1879.	3	5	20	21	24	26	103	47	36	27	19	10	2	246	99	344
1880.	3	4	23	35	27	68	151	75	40	24	31	12	2	336	162	498
1881.	4	9	20	35	43	84	217	123	42	32	22	11	4	450	195	645
1882.	2	18	32	47	85	260	87	44	43	19	10	2	465	185	650
1883.	2	3	23	29	33	92	133	84	68	29	20	11	2	397	133	579
1884.	2	5	22	35	45	92	113	53	26	13	12	2	.....	461	201	662
1885.	3	3	29	35	45	98	208	82	37	33	16	11	5	397	213	610

1886.	.....	5	12	35	40	103	225	79	59	23	21	9	3	1	423	195	618
1887.	.....	2	6	28	40	98	217	88	55	37	28	4	1	1	431	190	621
1888.	.....	5	1	14	29	55	119	801	126	55	35	21	9	2	552	233	755
1889.	.....	5	4	23	28	48	130	271	119	57	27	16	7	1	498	238	736
1890.	.....	1	3	9	34	44	105	242	119	53	30	17	7	1	470	196	666
1891.	.....	2	1	15	36	51	116	273	123	44	29	23	5	1	463	221	683
1892.	.....	3	3	12	31	33	76	123	91	38	15	18	6	3	294	145	440
1893.	.....	3	12	31	26	73	168	83	35	14	9	3	.....	.....	311	145	456
1894.	.....	1	10	19	25	57	127	69	39	16	5	1	.....	1	258	112	370
1895.	.....	2	12	23	37	72	152	99	38	11	13	6	2	.....	321	148	468
1896.	.....	3	1	11	30	22	55	151	65	33	21	8	2	.....	280	122	402
1897.	.....	.....	14	41	27	6	115	74	113	6	3	8	.....	.....	253	148	401
1898.	.....	2	6	10	39	52	78	255	108	56	13	11	7	2	452	187	639
1899.	.....	3	3	18	56	84	134	330	173	79	44	11	8	.....	650	293	948
1900.	.....	1	3	9	29	29	69	125	91	50	28	9	6	.....	309	140	449
1901.	.....	3	2	9	37	34	83	118	81	46	15	13	2	1	276	168	444
1902.	.....	4	1	35	48	99	183	110	49	30	13	5	.....	.....	390	198	593

Table IV—Showing a General Summary of Deaths, Male and Female, from Scarlet Fever, for the past Forty-one Years.

Years.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.		Totals.	
1842	461	20	49	17	21	18	23	23	19	18	27	15	12	15	7	13	5	8	12	17	21	10	21	11
1843	275	11	6	12	21	20	16	22	22	17	23	17	8	100	12	7	7	7	6	8	7	9	6	2
1844	310	5	6	4	11	12	12	11	9	11	8	11	8	15	13	11	10	7	8	12	31	29	47	50
1845	624	31	28	43	32	37	41	25	35	13	21	35	35	27	19	23	13	11	12	10	6	25	23	18
1846	461	28	33	24	28	12	11	18	20	22	17	24	22	18	12	15	8	11	19	13	17	30	23	39
1847	367	38	41	22	27	17	13	16	19	22	27	11	18	8	22	12	8	2	1	9	6	7	7	6
1848	224	8	11	4	8	10	4	10	10	6	6	12	11	6	5	6	9	10	8	12	9	11	16	20
1849	794	22	21	19	23	37	35	33	26	34	40	47	37	28	30	18	34	15	25	32	46	43	62	40
1850	956	57	15	30	55	87	67	72	74	76	90	38	62	27	26	17	18	6	10	7	7	14	14	16
1851	262	19	14	15	22	22	15	15	15	20	17	5	12	11	2	7	3	1	4	7	6	5	9	5
1852	174	6	9	10	10	8	6	7	7	8	9	11	15	9	10	5	5	1	2	5	3	7	5	8
1853	319	17	17	13	15	22	30	18	18	20	25	19	13	11	16	4	2	1	5	6	3	11	15	11
1854	461	21	20	17	22	18	11	17	21	17	16	22	11	14	15	17	18	27	20	23	28	18	19	23
1855	1,022	42	60	47	42	67	82	67	54	54	50	91	80	33	48	32	31	14	16	14	19	14	18	33
1856	323	30	25	29	15	37	29	24	18	15	23	12	8	14	3	4	2	1	4	7	10	9	6	10
1857	379	14	13	8	9	7	13	7	10	13	21	22	12	18	28	15	8	11	17	14	13	16	33	33
1858	554	22	24	26	22	23	26	22	30	32	32	19	17	17	20	16	9	15	17	35	28	19	22	19
1859	336	24	21	15	19	25	29	22	19	16	11	20	11	15	16	9	7	5	7	7	7	12	5	7
1860	291	5	12	10	18	5	6	7	10	17	26	12	16	3	8	9	18	6	5	4	12	19	23	27
1861	456	20	26	20	14	26	16	21	19	35	41	26	30	26	21	17	19	11	14	12	8	11	13	15
1862	310	17	19	17	13	17	11	12	13	26	15	11	15	10	12	10	6	6	10	7	7	7	18	10
1863	561	27	20	16	11	11	15	23	20	29	36	30	35	19	24	15	19	23	25	22	29	24	31	32
1864	510	62	49	28	32	33	33	31	28	38	30	25	25	17	14	6	9	7	4	8	9	10	20	21
1865	375	31	27	19	18	35	24	21	17	16	23	25	11	18	4	5	3	1	12	9	6	16	9	11
1866	158	16	10	8	12	19	21	18	17	12	20	10	10	9	10	7	3	2	3	7	4	7	8	10
1867	157	9	10	8	10	8	10	7	10	2	7	3	10	4	6	5	6	3	2	6	4	4	5	10
1868	235	12	14	12	12	3	7	7	5	6	7	8	4	4	4	4	4	3	19	15	20	17	18	21

1889.	298	26	29	42	33	16	21	12	5	13	18	7	12	4	7	3	8	8	4	5	12	9	11	12	12	7	12
1890.	189	7	7	3	5	3	2	8	7	6	14	8	4	4	7	3	8	3	9	3	13	9	16	18	18	16	17
1891.	341	14	14	9	12	9	13	19	18	15	14	14	9	8	8	7	7	9	10	6	16	14	22	18	36	28	
1892.	485	25	37	28	23	43	41	27	13	31	44	13	19	9	10	7	9	6	4	11	15	8	22	19	16	16	
1893.	297	25	29	14	22	12	16	11	8	14	11	13	10	5	5	4	4	5	5	8	12	9	6	12	12	3	
1894.	153	14	8	15	11	7	1	5	3	10	4	3	10	4	3	3	3	4	.....	4	3	2	6	2	5	4
1895.	79	5	5	5	5	4	4	2	6	4	2	5	3	3	3	3	3	1	4	4	4	4	1	4	4	4	
1896.	61	8	5	10	15	30	23	16	18	15	21	4	8	2	2	3	1	2	3	7	5	2	1	1	2	3	
1897.	252	5	6	10	6	11	16	9	2	10	12	2	17	18	12	9	9	5	5	2	8	8	1	7	3	2	
1898.	114	4	4	10	6	4	3	7	6	6	5	5	3	3	4	4	2	3	3	3	8	1	7	3	2	2	
1899.	132	11	9	4	4	4	3	7	6	6	5	5	3	3	2	5	7	5	7	5	7	7	7	7	6	7	
1900.	163	13	15	5	7	6	6	14	16	20	11	11	5	5	5	3	3	5	1	3	3	3	3	3	3	4	
1901.	220	11	16	11	14	13	9	9	15	16	14	11	11	9	9	1	1	5	1	3	3	8	3	3	11	16	
1902.	143	14	9	6	6	3	5	13	7	9	7	12	6	4	4	5	5	5	4	4	5	2	2	2	4	5	

Table V—Showing a General Summary of Deaths, Male and Female, from Consumption, for the past Forty-one Years.

Years.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1862.	1,949	93	93	85	77	102	98	70	99	127	68	57	68	76	77	68	46	71	92	85	58	84	92	73
1863.	1,953	90	74	87	75	85	104	105	79	67	61	60	86	85	75	83	85	70	69	89	74	83	70	96
1864.	2,083	95	90	77	68	111	119	144	124	106	78	73	67	63	83	85	70	69	89	74	83	70	96	107
1865.	2,086	96	75	113	83	115	80	96	81	78	89	90	84	63	64	83	64	57	62	65	87	111	85	79
1866.	1,944	110	107	88	90	86	79	108	83	82	71	59	66	92	89	92	63	65	106	79	65	73	78	68
1867.	1,947	113	111	87	82	97	96	73	96	107	65	67	76	97	51	53	59	68	83	91	62	73	69	78
1868.	1,995	110	104	90	91	96	74	120	119	78	71	86	76	64	66	61	85	83	70	65	70	78	87	84
1869.	1,975	80	80	85	99	100	100	107	80	77	79	90	73	71	80	91	59	64	73	69	82	84	74	99
1870.	2,308	89	111	102	95	129	124	112	94	126	78	78	73	106	77	100	64	71	72	81	103	111	93	186
1871.	2,337	84	90	104	101	140	119	94	113	85	58	58	99	78	81	113	97	74	82	99	69	80	80	101
1872.	2,330	128	118	106	103	95	113	124	107	113	80	83	98	98	85	85	80	73	98	108	87	82	73	71
1873.	2,291	104	123	126	116	138	130	90	85	95	90	78	103	92	103	55	87	73	96	124	98	98	59	72
1874.	2,304	12	109	80	106	156	128	115	118	75	65	77	96	83	69	84	58	71	99	100	83	91	125	107
1875.	2,359	194	80	116	89	130	130	119	100	98	111	97	83	62	99	83	109	87	73	93	104	92	84	109
1876.	2,678	197	122	105	113	179	149	119	97	115	137	85	110	80	83	90	93	94	127	124	123	96	114	109
1877.	2,349	114	126	99	93	95	107	118	112	130	120	87	82	86	94	78	73	94	88	93	77	93	102	108
1878.	2,491	120	138	96	106	99	126	107	101	117	125	87	105	65	106	103	81	101	95	124	98	105	88	97
1879.	2,471	127	152	110	104	132	121	117	103	95	82	85	75	101	116	88	90	88	91	97	122	93	102	102
1880.	2,692	129	119	102	115	151	154	90	107	127	143	95	92	95	102	109	78	88	102	95	108	95	134	155
1881.	2,768	105	137	112	121	140	139	122	138	139	130	97	93	83	86	109	107	109	116	109	108	98	114	159
1882.	2,809	162	179	136	153	135	119	101	128	129	139	91	87	101	90	108	125	87	85	120	114	101	120	103
1883.	2,798	161	144	106	124	123	134	127	120	146	79	104	89	104	116	127	109	105	125	130	86	119	102	98
1884.	2,801	147	137	121	99	142	122	148	169	85	100	104	112	124	123	89	90	91	109	131	99	110	106	132
1885.	2,821	156	152	108	122	160	161	120	123	126	84	100	124	100	124	95	95	98	140	103	102	102	124	136
1886.	2,834	111	117	120	98	190	137	116	128	143	142	87	101	83	97	133	116	92	48	99	120	117	106	153
1887.	2,800	125	118	141	126	153	156	133	139	146	124	106	81	94	114	130	96	84	93	106	84	98	93	125
1888.	2,695	140	127	145	132	132	114	125	166	156	156	101	85	100	122	91	86	96	119	123	96	86	125	109

1889.	2,532	113	126	103	107	115	99	116	102	143	133	100	78	103	111	88	87	97	83	126	115	81	101	112	83
1890.	2,764	231	158	139	107	113	115	128	109	122	114	93	83	116	112	93	87	108	83	118	101	99	95	97	98
1891.	2,636	159	127	87	104	134	94	135	113	127	92	83	92	119	97	89	84	69	82	150	111	94	108	132	152
1892.	2,709	143	150	135	96	161	140	127	102	141	114	82	107	96	82	129	111	107	88	127	103	99	82	136	88
1893.	2,671	151	116	128	106	107	96	128	110	152	144	105	94	123	92	116	108	94	88	98	94	100	97	135	91
1894.	2,513	159	123	105	105	11	110	125	108	139	86	92	84	94	78	106	111	91	81	110	104	92	99	112	82
1895.	2,449	138	98	128	87	117	104	106	92	148	129	94	78	103	99	93	89	84	66	108	106	93	102	108	79
1896.	2,514	117	117	82	80	121	118	72	87	86	75	119	95	150	113	125	77	152	127	116	115	121	93	80	76
1897.	2,388	138	104	108	105	100	109	126	109	107	91	106	95	82	89	87	99	90	55	82	79	125	94	105	61
1898.	2,590	115	93	118	106	140	132	114	97	147	103	95	78	100	74	127	115	97	77	103	67	123	119	136	104
1899.	2,818	175	146	137	110	148	110	131	119	161	118	106	90	115	101	122	81	108	96	105	89	120	120	117	93
1900.	2,717	150	123	132	87	124	115	141	116	137	122	105	82	88	99	137	102	80	106	126	121	103	87	133	101
1901.	2,946	146	135	133	118	146	158	148	130	172	136	124	93	49	131	100	106	94	81	37	101	105	96	117	84
1902.	2,845	156	121	141	127	146	106	169	141	142	94	114	97	137	109	94	78	87	99	132	109	125	104	119	98

Table VI—The following table shows the ratio of deaths, with population, for the past forty-two years.

Years.	Population.	Deaths.	Deaths to 1,000 persons living.	Persons living to one death.
1861,	576,408	13,540	23.49	42.57
1862,	587,287	13,864	23.60	42.38
1863,	598,166	14,220	23.73	42.06
1864,	608,045	15,875	26.10	38.30
1865,	618,924	15,633	25.25	39.59
1866,	620,803	15,362	23.80	40.99
1867,	640,682	12,660	19.76	50.80
1868,	651,561	13,391	20.39	48.65
1869,	662,440	13,428	20.27	49.33
1870,	*674,023	15,317	22.72	44.00
1871,	700,000	15,485	22.13	45.20
1872,	725,000	18,987	26.19	38.18
1873,	750,000	15,224	20.29	49.26
1874,	775,000	15,238	19.66	50.86
1875,	800,000	17,805	22.25	44.93
1876,	825,594	18,592	22.88	43.69
1877,	850,856	16,004	18.81	53.16
1878,	876,118	15,743	17.97	55.65
1879,	901,380	15,473	17.17	58.25
1880,	*846,960	17,711	20.91	47.82
1881,	868,000	19,515	22.48	44.47
1882,	886,539	20,069	22.62	44.19
1883,	907,041	20,076	22.13	45.18
1884,	927,995	19,999	21.55	46.40
1885,	949,432	21,392	22.53	44.38
1886,	971,363	20,006	20.59	48.55
1887,	993,801	21,719	21.85	45.75
1888,	1,016,758	20,372	20.04	49.90
1889,	1,040,245	20,536	19.74	50.65
1890,	*1,046,964	21,732	20.76	48.18
1891,	1,069,264	23,367	21.85	45.75
1892,	1,092,168	24,305	22.25	44.93
1893,	1,115,563	22,655	21.20	47.15
1894,	1,139,457	22,680	19.90	50.24
1895,	1,163,864	23,796	20.44	48.90
1896,	1,188,790	23,982	20.17	49.57
1897,	1,214,276	22,735	18.72	53.40
1898,	1,240,296	23,760	19.18	52.13
1899,	1,266,832	23,756	18.78	53.23
1900,*	1,293,497	25,078	19.38	51.59
1901,	1,321,408	24,157	18.26	54.74
1902,	1,349,712	23,847	17.67	56.60

*U. S. Census, the intervening years' population estimated.

Toble VII—Deaths in each year from small-pox from 1897 to 1902, inclusive, with the average population each year, and deaths to every 1,000 persons living.

Years.	Deaths.	Deaths to 1,000 persons living.	Years.	Deaths.	Deaths to 1,000 persons living.
Population 111,210:			Population 564,529:		
1897,	32	.28	1856,	290	.68
1898,	145	1.28	1857,	65	.11
1899,	101	.90	1858,	7	.01
1810,	34	.30	1859,	1	.003
1811,	117	1.04	1860,	57	.10
1812,			1861,	758	1.24
1813,			1862,	264	.46
1814,			1863,	171	.30
1815,			1864,	280	.46
Population 137,097:			1865,	524	.93
1816,	97	.77	Population 674,022:		
1817,	52	.30	1866,	144	.21
1818,	8	.05	1867,	48	.07
1819,	1		1868,	48	.07
1820,			1869,	6	.008
1821,			1870,	9	.01
1822,			1871,	1,879	2.78
1823,	160	1.16	1872,	2,585	3.83
1824,	236	2.37	1873,	39	.05
Population 138,797:			1874,	15	.02
1825,	6	.04	1875,	54	.08
1826,	3	.01	Population 846,980:		
1827,	100	.52	1876,	407	.45
1828,	107	.56	1877,	155	.17
1829,	81	.42	1878,		
1830,	86	.45	1879,	6	.006
1831,	14	.07	1880,	424	.5
1832,	37	.19	1881,	1,336	1.57
1833,	156	1.82	1882,	214	.3
1834,	196	1.03	1883,	173	.02
1835,	101	.53	1884,	35	.04
Population 268,034:			1885,	6	.008
1836,	76	.33	Population 1,046,964:		
1837,	79	.34	1886,	4	.003
1838,	42	.16	1887,		
1839,	5	.01	1888,	80	.074
1840,	63	.24	1889,		
1841,	259	1.00	1890,		
1842,	156	.60	1891,	5	.004
1843,	36	.13	1892,		
1844,	17	.06	1893,	5	.004
1845,	190	.73	1894,	13	.011
1846,	251	.61	1895,	45	.38
Population 408,762:			1896,		
1847,	9	.02	Population 1,293,697:		
1848,	100	.24	1897,		
1849,	152	.37	1898,		
1850,	40	.09	1899,		
1851,	216	.52	1900,		
1852,	427	1.04	1901,	156	.118
1853,	57	.13	1902,	231	.172
1854,	40	.09			
1855,	275	.67			

Pine Grove, Schuylkill County.

Contagious diseases reported and houses placarded. Pneumonia has been unusually prevalent during the year. General registration is enforced.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$25.00 per annum.

Plymouth, Luzerne County.

Total number of deaths, 209; total number of births, 249.

Contagious diseases: small-pox, 58, deaths, 9; scarlet fever 26, deaths, 1; diphtheria 30, deaths, 6; measles 23, deaths, 3; total cases, 139; total deaths, 19.

Nuisances reported, 238; nuisances abated, 238.

Regular permits issued, 206; railroad transit permits issued 3; transit permits issued, 58; total permits issued, 267.

Port Allegany, McKean County.

Contagious diseases reported. House placarded and quarantined. Sewers have been laid through half of the town.

Salary of secretary, \$20.00 per annum.

Health officer receives fees for work done.

Port Carbon, Schuylkill County.

Contagious diseases reported. Houses placarded and quarantined. There have been no deaths from such diseases during the year. Registration enforced, excepting that of vaccination of school children.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$40.00 per annum.

Pottsville, Schuylkill County.

Contagious diseases reported. Houses placarded and quarantined. Under sanitary regulations for the control of the Municipal Hospital. Sanitary measures under control of the health officer during the year. There have been no deaths from such diseases during the year. Registration enforced, excepting that of vaccination of school children.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$40.00 per annum.

Punxsutawney, Jefferson County.

Contagious diseases reported. House placarded and quarantined.
Registration is not enforced.

Salary of secretary, \$25.00 per annum.

City of Reading.**Small-pox.**

The six outbreaks of small-pox were as follows: The first outbreak was on Maple street. The disease was contracted from a person of Philadelphia visiting in Reading. Three other cases followed in the same family. All were treated at the Emergency Hospital. The second was that of a boy on Muhlenberg street. The disease was likewise contracted, and, as is supposed, from the same party as the previous case. Five others became victims from this source. All were treated at the hospital.

The second outbreak was reported April 27. It occurred in a family on South Eighth street. A small-pox patient, treated at the county house, having been discharged, invited some of his friends to a party. A certain young man who was present contracted the disease and six other cases followed in the immediate neighborhood.

The third outbreak occurred July 17. This was on Oley street. The patient contracted the disease in Philadelphia where it was prevalent. Another party living in the same house contracted it from the patient referred to. Both were treated at the hospital.

The fourth outbreak occurred July 21 in a boarding house on Washington street. The disease was brought there by a boarder visiting in Schuylkill county. After returning to said boarding house, the party was taken sick and died within two days. The proprietress of the house having nursed the patient, contracted the disease from him and was later taken to the hospital, where she was treated. Another party visiting at the house before the case was reported to the health department, took the disease after fifteen days. Treated at the hospital.

On September 10, the fifth outbreak was reported. This was a boy eight years old, who, with his parents, visited in Lancaster county where the disease prevailed. Four other cases followed. All were treated at the hospital.

The sixth outbreak occurred September 11. The cases were among the colored people. The disease was contracted at Rock Run, a vil-

lage near Contonville, where the disease was prevalent, and where a number had visited. It was pronounced chicken-pox by the attending physician, but a doctor of the State Board of Health declared it small pox.

There were seven cases in all, which were taken to the hospital without any fatality.

Typhoid Fever.

This disease was more or less prevalent during the year, though the mortality caused thereby was not proportionally great. Three hundred and forty-two cases were reported, with fifty-five deaths.

Water Supply.

The city water supply comes principally from springs some distance from the city. The streamlets formed commingle, producing larger streams, the water of which is finally collected in our reservoirs. The streams flowing through the ravines are not unfrequently rendered impure by floods of rain washing refuse into them. No matter how pure the water may be when it issues from the earth in the form of springs, it may become very dangerous to health by the time it reaches the reservoirs.

(We recommend filtration as the only true precaution.)

Cleanliness of Streets, Pavements and Alleys.

Spitting on the pavement should absolutely be prohibited. Disease germs being scattered all around by the sputum, and being permitted to dry, are raised by pedestrians. These contaminate the air, and the health of the people is endangered. Pavements should be carefully scrubbed at regular intervals, and all refuse matter, wherever found, should be immediately removed and destroyed.

All houses and rooms where contagious and communicable diseases existed, especially consumption and small pox, should be thoroughly disinfected after a funeral, and in the event of troop occupancy, with formaldehyde gas.

Halls, churches and audience rooms should be disinfected after every gathering, since the air is always made impure by the breath of the people, from the sputum and from the particles of matter dropping from clothing, etc. It is in public places where disease is often spread, causing epidemics.

We would recommend the disinfection of all of these with formaldehyde gas, using all the means at hand on a large scale.

Births—1,961.

Nineteen hundred and sixty-one births were reported for Reading during the year, an increase of 147 over the previous year.

Of these there were 68 still born and 51 premature and did not live.

The excess of births over deaths was 786.

The births were 23.34 in 1,000 for the year, and the death rate 14.02 plus.

Marriages—995.

During the year there were 995 marriages performed in this city, an increase of 81 over 1901.

Deaths—1,509.

Permits were issued by the department of health for the burial of 1,509 bodies during the year 1902, a decrease of 118 over the preceding year.

Of this number 212 were brought here for burial, 68 were still born and 51 were premature.

Of the decedents 511 were married, 753 were single, 240 were widowed and 5 were unknown.

Eight hundred and twenty-nine were males and 680 females.

Of the prematurely born 30 were males and 21 females.

Of the still born 40 were males and 28 were females.

Of the decedents 1,351 were born in the United States and 158 were of foreign birth.

In the city, exclusive of those brought from a distance and the still and premature born, the monthly average deaths were 98.16, and the weekly average 22.65.

The estimated population of the city of Reading is 84,000. The annual ratio of death per 1,000 inhabitants is 14.02 plus.

Year.	Population.	Total deaths.	Death rate.
1902,	84,000	1,178	14.02+

RECORD OF TEMPERATURES AT GREENSBORO, N. C., FOR 1908.

Barometer at 10 A. M. 30.1; at 4 P. M. 30.0; at 10 P. M. 29.9. Thermometer at 7 A. M. 57.1; at 1 P. M. 67.1; at 7 P. M. 60.1. Wind at 10 A. M. S. by E. at 4 P. M. S. by E. at 10 P. M. S. by E. Direction of surface current at 10 A. M. S. by E. at 4 P. M. S. by E. at 10 P. M. S. by E. Direction of bottom current at 10 A. M. S. by E. at 4 P. M. S. by E. at 10 P. M. S. by E. Direction of surface current at 10 A. M. S. by E. at 4 P. M. S. by E. at 10 P. M. S. by E. Direction of bottom current at 10 A. M. S. by E. at 4 P. M. S. by E. at 10 P. M. S. by E.

Temperature.

Maximum		Minimum		Warmest Days.		Coldest Days.	
Mean		Day of month.		Mean temperature.		Day of month.	
51	27.9	22	13	42	21	15	29
28	27.1	28	6	51	23	11	5
4	42.4	29	18	60	29	25	18
8	51.4	22	30	75	23	33	2
26	61.7	23	37	77	23 & 24	43	10
29	69.1	13	46	80	3	60	23 & 24
24	72.8	17	53	79	9, 14, 17	66	1
10	70.2	30	48	78	11	81	16
26	64.1	1	40	80	13	81	16
11	64.7	13	29	80	15	83	14 & 15
28	48.5	13	37	67	13	39	29
16	30.6	31	13	60	6	25	30
59	59.6	21	13	50	21	16	9
51.9	51.9						

at 10 A. M.

Monthly Report of Contagious Diseases.

Months.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Membranous Group.		Small-pox.		Total.
	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	
January,	10	.....	27	1	26	4	.....	.....	2	65	5
February,	7	2	32	4	8	2	3	3	8	53	11
March,	5	4	20	.....	19	9	3	.....	.....	47	13
April,	20	.....	24	.....	8	3	.....	.....	1	53	3
May,	4	.....	40	.....	6	3	.....	.....	6	56	5
June,	3	.....	19	1	6	.....	.....	.....	.....	23	4
July,	4	1	12	1	2	1	.....	.....	3	27	2
August,	23	3	8	1	5	.....	1	.....	1	38	4
September,	47	6	5	.....	9	1	.....	.....	10	71	7
October,	73	13	8	.....	7	1	2	2	2	92	16
November,	98	6	8	.....	17	3	3	1	.....	121	9
December,	53	15	17	1	1	3	1	1	.....	72	20
Total,	343	55	226	9	114	29	13	7	33	728	100

Salary of secretary, \$400.00 per annum.
Salary of health commissioner, \$880.00 per annum.

Benovo, Clinton County.

Contagious diseases reported. Houses placarded. Partial registration enforced.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$100.00 per annum.

Reynoldsville, Jefferson County.

Contagious diseases reported. Houses placarded and quarantined. Principal of school keeps record of vaccination of children.

Salary of secretary, \$25.00.

Ridgway, Elk County.

Contagious diseases reported and houses placarded. There have been few such diseases in the town, excepting 28 cases of diphtheria, with 4 deaths, and 20 of scarlet fever, with 1 death. Registration is not enforced, excepting that of vaccination of school children.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$50.00 per annum.

Rochester, Beaver County.

Contagious diseases generally reported. Houses placarded and quarantined. One thousand one hundred and fifty-one houses have been inspected during the year. Partial registration enforced.

Rockledge, Montgomery County.

Contagious diseases reported and houses placarded.

Salary of secretary, \$5.00.

Rockwood, Somerset County.

This board organized in December, 1902.

Contagious diseases reported. Houses placarded and quarantined. Excepting seven cases of small-pox the town has been free from contagious diseases during the year.

Scott, Allegheny County.

The town has been very free from contagious diseases, excepting six cases of small-pox and two of diphtheria. Physicians report these diseases, and in the case of small-pox the houses are quarantined and guarded, and the expenses incurred paid from the school fund.

Salary of sanitary agent, \$2.00 per day.

Scottdale, Westmoreland County.

Contagious diseases reported excepting typhoid fever, measles and consumption. Houses placarded and quarantined. Registration is not enforced.

Salary of secretary, \$10.00 per month.

Salary of health officer, \$15.00 per month.

Selinsgrove, Snyder County.

Contagious diseases are not reported, but when notified of such cases houses are placarded and quarantined in spite of opposition of inmates. Registration is not enforced excepting that of vaccination of school children.

Salary of secretary, \$15.00 per annum.

Salary of health officer, \$10.00 per annum.

Sewickley, Allegheny County.

Deaths Registered.

Males, 29; females, 28; total, 57. Average age, males, 44; females, 45; total average, 44.6.

Classified Causes of Death.

Typhoid fever,	3	Jaundice,	1
Valvular disease of heart,	5	Erysipelas,	1
Tuberculosis,	5	Gastric catarrh,	2
Cancer,	2	Apoplexy,	1
Hemorrhage of stomach,	2	Cerebral hemorrhage,	1
Suicide by poison,	2	Cerebral thrombus,	1
Measles,	3	Cerebral embolism,	1
Pneumonia,	3	Dropsy,	1
Asthenia,	5	Inflammation of brain,	1
Congestion of lungs,	2	Marasmus,	1
General debility,	3	Enterocolitis,	1
Spinal meningitis,	2	Still born,	2
Deaths by accident,	7		

Estimating the population at 3,700, the death rate per thousand was 15.4.

Births.

The total number of births reported was 65.

Contagious Diseases.

Measles, 28; scarlet fever, 8; typhoid fever, 7; diphtheria, 4; small-pox, 4; varioloid, 3; tuberculosis, 6; total, 60.

Small-pox again visited this community as in 1901, touching four different points. Through prompt means employed for cure and prevention, its progress was successfully arrested and no fatal cases occurred within the borough.

Nuisances.

The sanitary officer reported 35 cases of nuisance during the year, all of which, upon official notice, were promptly abated.

Milk Inspection.

The monthly inspection of milk received regular and faithful attention; the quality of milk furnished was, in no instance, below the required standard and, in most cases, was in excess of legal requirement.

Salary of secretary, \$10.00 per month.

Salary of health officer, 25.00 per month.

Sharpsburg, Allegheny County.

Contagious diseases reported and houses placarded. There have been 46 cases of small-pox, 73 of typhoid fever and 23 of scarlet fever, but no fatalities in any of these cases. The suppression of the epidemic of small-pox entailed an outlay of \$4,500.00 in excess of the board's appropriation. Partial registration is enforced, including that of vaccination of school children.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$25.00 per month.

Sharpsville, Mercer County.

Contagious diseases not reported, excepting diphtheria. Houses placarded.

Salary of secretary, \$15.00.

Salary of health officer, \$120.00.

Sheraden, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined and, in cases of small-pox, guarded. By this means this disease, which entered the borough in September, was confined to two houses and the town was spared an epidemic.

Population estimated at 3,500.

Births, 68 males, 63 females; 130 white, 1 black; total, 131.

Deaths, 42, in addition to 22 which resulted from a naphtha explosion.

Registration of births only enforced.

Salary of secretary, who acts as health officer, \$150.00 per annum.

Shippenville, Clarion County.

Contagious diseases reported and houses placarded. The town has been unusually healthy during the year. Registration not enforced.

Salary of secretary, \$5.00 per annum.

Slatington, Lehigh County.

Contagious diseases reported and houses placarded. There have been no such cases during the year, excepting one of diphtheria, which resulted fatally. General registration enforced.

Salary of secretary, \$40.00 per annum.

Salary of health officer, \$120.00 per annum.

Smithfield, Huntingdon County.

No contagious diseases have occurred during the year.

Secretary receives fees for work done.

Spring Grove, York County.

Contagious diseases reported. Houses placarded and quarantined and, when necessary, guarded. Whooping cough has been unusually prevalent during the year. The water supply has been much improved.

Salary of secretary, \$10.00 per annum.

Salary of health officer, \$20.00 per annum.

St. Clair, Schuylkill County.

Contagious diseases usually reported. Houses placarded and principals of schools notified. Scarlet fever has been unusually prevalent but only resulted in three deaths. The town is in need of a better sewerage system. All teachers and scholars have been vaccinated, and at the suggestion of the board the school board purchased a formaldehyde generator with which to fumigate the schools. The town has been free from small-pox. General registration is enforced.

Salary of secretary, \$7.50 per month.

Salary of health officer, \$25.00 per month.

Steelton, Dauphin County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. The borough has had to contend with a severe epidemic of typhoid fever, with a record of 404 cases and 33 deaths. It was attributed to a polluted water supply.

Salary of secretary, \$10.00 per month.

Salary of health officer, \$50.00 per month.

Susquehanna, Susquehanna County.

Contagious diseases reported. Houses placarded and quarantined. Pneumonia and influenza have been unusually prevalent and there have been two cases of cerebro-spinal meningitis. The town is much in need of a sewerage system. Registration partially enforced.

Salary of secretary, \$30.00 per annum.

Salary of health officer, \$50.00 per annum.

Swarthmore, Delaware County.

Contagious diseases reported and houses quarantined. Measles and chicken-pox have been unusually prevalent, but the epidemic abated after the school had been fumigated.

Salary of secretary, \$50.00 per annum.

Salary of health officer, 25 cents per hour for actual time given.

Taylor, Lackawanna County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. There have been eight cases of small-pox in the borough, but no fatalities from the disease. The borough has been improved by the laying of sewer. Partial registration enforced, including that of vaccination of school children.

Salary of secretary, \$75.00 per annum.

Salary of health officer, \$100.00 per annum.

Telford, Bucks County.

Small-pox, diphtheria and scarlet fever are reported and the houses placarded. Registration is not enforced.

Salary of secretary, \$10.00 per annum.

Salary of health officer, 25 cents for actual time employed.

Titusville, Crawford County.

The statistics for the year ending December 31, 1902, are not as favorable as those of the year 1901. The opening of the Titusville Hospital, which has been crowded with the sick from neighboring townships, has added largely to the number of zymotic diseases reported and increased the number of deaths registered. This reflects upon the reputation of the city as a healthful place of residence, by increasing the ratio of deaths per thousand and showing a larger percentage of zymotic diseases. But, aside from this factor of increase, there has been a markedly larger number of deaths as well as a decided shrinkage in births.

Seven (7) sewer notices were served and enforced during the year, and seventeen (17) special nuisances abated.

The inspector of herds and dairies reports 14 herds inspected, which contained 356 cattle. One dairy cow was condemned and destroyed. One hundred and ninety-four samples of milk were tested for butter fats, and 114 samples were tested for preservatives, viz, boric acid, salicylic acid, formaldehyde, etc. The sanitary conditions of all the dairies are good, and the cattle which supply milk to the citizens of Titusville are healthy and in good condition.

Deaths in the City of Titusville During the Year 1902.

White, 97; blacks, 2; males, 43; females, 56; married, 43; single, 27; widowed, 26; divorced, 1; not mentioned, 2.

By Months.

January,	15	July,	7
February,	10	August,	9
March,	7	September,	8
April,	10	October,	9
May,	3	November,	9
June,	3	December,	8

Age at Time of Death.

Under 1 year,	9	Between 30 and 40 years,	6
Between 1 and 2 years,	0	Between 40 and 50 years,	6
Between 2 and 3 years,	2	Between 50 and 60 years,	14
Between 3 and 4 years,	1	Between 60 and 70 years,	19
Between 5 and 10 years,	4	Between 70 and 80 years,	16
Between 10 and 20 years,	1	Between 80 and 85 years,	6
Between 20 and 30 years,	9		

Cause of Death.

Accident, saw mill,	1	Dropsy,	1
Acute gastritis,	4	Gangrene senilis,	1
Acute indigestion,	1	Grippe,	1
Acute nephritis,	1	Heart disease,	12
Anaemia,	1	Heart rupture,	1
Aneurism aorta,	1	Hepatitis,	1
Aortic stenosis,	1	Hemorrhage,	1
Apoplexy,	5	Ileo colitis,	1
Arterio sclerosis,	1	Intestinal obstruction,	1
Age and infirmity,	3	Erysipelas,	1
Bright's disease,	1	Enteritis,	1
Bronchitis,	2	Oedema glottis,	1
Cancer,	2	Osteo sarcoma, femur,	1
Cancer, breast,	2	Paralysis,	1
Cancer, throat,	1	Pelvic abscess,	1
Cancer, chest,	1	Pericarditis,	2
Cancer, stomach,	3	Peritonitis,	1
Carcinoma,	1	Pneumonia,	5
Cerebral hemorrhage,	1	Premature birth,	2
Chondroma,	1	Pulmonary congestion,	1
Cholera infantum,	1	Scarlet fever,	1
Chronic gastritis,	3	Softening, brain,	1
Cirrhosis liver,	2	Suicide, gunshot,	1
Consumption,	3	Tuberculosis,	2
Convulsions,	2	Tubercular peritonitis,	1
Cystitis,	1	Tubercular laryngitis,	1
Diphtheria,	3	Uraemia,	1
Diabetes,	1	Violence,	1

Births—120.

Males, 60; females, 60; still born, 1.

Zymotic Diseases.

	Cases.	Deaths.
Scarlet fever,	32	1
Diphtheria,	12	3
Typhoid fever,	10	.....
Measles,	5	.....

Partial registration is enforced, including that of vaccination of school children.

Salary of secretary, who acts as health officer, \$200.00 per annum.

Third Gap, Northampton County.

Contagious diseases reported. Houses placarded and quarantined. Registration of births and of vaccination of school children enforced.

Salary of secretary, \$12.00 per annum.

Salary of health officer, \$12.00 per annum.

Tyrone, Blair County.

Contagious diseases reported. Houses placarded and quarantined. Pneumonia has been unusually prevalent during the year. In three cases the pure food inspector found preservaline in oysters, and the dealers were arrested and fined.

Salary of secretary, \$5.00 per month.

Salary of health officer, \$5.00 per month.

Upper Providence, Montgomery County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. Very few such cases have occurred during the year.

Salary of sanitary agent, \$50.00 per annum.

Verona, Allegheny County.

Contagious diseases reported. Houses placarded and quarantined. Registration is not enforced, excepting that of vaccination of school children.

Salary of secretary, \$25.00 per annum.

Versailles, Allegheny County.

Contagious diseases reported and houses placarded and, in cases of small-pox guarded. Four cases of small-pox occurred in one family, but prompt measures were taken by the board and the disease did not spread. General registration is enforced.

No salaries.

Warren, Warren County.

Contagious diseases reported and houses placarded, quarantined and fumigated. There has been six cases of a mild type of small-pox and 29 of typhoid fever traced to a polluted water supply. The town is much in need of more sewers. Partial registration is enforced.

Salary of secretary, \$15.00 per month.

Salary of health officer, \$430.00 per year.

Washington, Washington County.

Contagious diseases reported. Houses placarded and quarantined and schools notified. Pneumonia has been unusually prevalent, resulting in fourteen deaths. The town has been improved by the building of a new reservoir, and the extension of the sewerage system. Registration of still births and of vaccination of school children enforced.

Salary of secretary, \$180.00 per annum.

Salary of health officer, \$600.00 per annum.

Watsonstown, Northumberland County.

Contagious diseases reported. Houses placarded and quarantined. There has been but little sickness during the past year. The school was closed and fumigated owing to a case of diphtheria, after which no more cases occurred. Registration is not enforced.

Salary of health officer, \$10.00.

Wayne, Lawrence County.

Contagious diseases reported. Houses placarded and quarantined. There have been very few such cases, excepting one outbreak of small-pox, which resulted in fifteen cases.

Salary of secretary, 20 cents per hour for actual time expended.

Weatherly, Carbon County.

Contagious diseases reported. Houses placarded and quarantined.

Births, Deaths and Marriages.

	Births.			Deaths.			Marriages.
	Males.	Females.	Total.	Males.	Females.	Total.	
1902.							
January,	5	1	6	.....	.....	.....	.....
February,	1	1	2	2	1	3	.....
March,	7	2	9	2	1	3	.....
April,	3	4	7	2	1	3	.....
May,	2	5	7	2	2	4	.....
June,	1	2	3	.....	1	1	.....
July,	3	1	4	2	2	4	.....
August,	6	5	11	3	1	4	.....
September,	2	2	4	1	.....	1	.....
October,	1	3	4	3	1	4	.....
November,	1	1	2	.....	1	1	.....
December,	1	2	3	1	1	2	.....
Total,	33	29	62	18	12	30	19

Ages.

Between 90 and 80,	2	Between 20 and 10, .....	..
Between 80 and 70,	2	Between 10 and 1,	5
Between 70 and 60,	2	1 and under,	5
Between 60 and 50,	2	Premature,	3
Between 50 and 40,	4		
Between 40 and 30,	2		30
Between 30 and 20,	1		

Deaths from Disease.

Accident,	2	Intususception of bowels,	1
Apoplexy,	2	Pernicious anemia,	1
Cholelitheses,	1	Pneumonia,	2
Chronic entero colitis,	1	Spasmodic croup,	1
Congestion of lungs,	1	Tubercular,	1
Debility,	3	Uraemia,	1
Dropsy,	1	Premature birth,	3
Dysentery,	3	Membranous croup,	1
Eczema,	1		
Heart failure,	3	Total,	30
Inflammation of bowels,	1		

Number of contagious diseases reported, 3. Houses placarded, 3.

Death rate per thousand, exclusive of premature births and accidents, about 10.

Population, about 2,500.

Salary of sanitary agent, \$5.00 per annum.

Wells, Fulton County.

There have been no contagious diseases in the town during the past year, excepting measles. There were 100 cases of this disease in a population of 500.

Wellsboro, Tioga County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. Very few such cases have occurred during the year, and the general condition of the town has been much improved by a more extended sewerage system and water supply. Partial registration is enforced.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$25.00 per annum.

Wells Township, Fulton County.

No contagious diseases have occurred during the year.

Registration of vaccination of school children is enforced.

No salaries.

West Bethlehem, Lehigh County.

Contagious diseases reported. Houses placarded and quarantined. Diphtheria has been more prevalent than any other contagious disease, 26 cases occurring with 5 deaths.

Partial registration enforced. School board registers vaccination of school children.

Salary of secretary, \$50.00 per annum.

Salary of health officer, \$100.00 per annum.

West Bridgewater, Beaver County.

Contagious diseases not always reported. Houses placarded and quarantined. Measles, mumps and whooping cough have been unusually prevalent during the year.

Salary of secretary, \$25.00 per annum.

Salary of health officer, \$60.00 per annum.

West Chester, Chester County.

Contagious diseases reported. Houses placarded and quarantined. Influenza, pneumonia and whooping cough have been unusually prevalent. Registration of still-births and of vaccination of school children enforced.

West Easton, Northampton County.

The town has been free from contagious diseases excepting one case of diphtheria.

Westfield, Tioga County.

Contagious diseases reported. Houses placarded and quarantined. Twelve cases of typhoid fever occurred, resulting in one death. The patients were all in families where the city water was not used. Registration of vaccination of school children is enforced.

Salary of secretary, \$10.00 per annum.

Health officer is paid for actual work done.

West Hazleton, Luzerne County.

Contagious diseases reported and houses placarded. The town has been improved by the extension of the sewerage system. General registration is enforced.

Salary of secretary, \$30.00 per annum.

Salary of health officer, \$60.00 per annum.

West Pittston, Luzerne County.

Contagious diseases reported. Houses placarded, quarantined and fumigated. Registration of births and of vaccination of school children is enforced.

Salary of secretary \$100.00 per annum.

Salary of health officer \$240.00 per annum.

Williamsport, Lycoming County.

Contagious Diseases.

It will be seen by the following tables that the city was seriously endangered by outbreaks of small-pox, diphtheria and scarlet fever. The eight cases of small-pox arose from cases contracted in other places where vaccination is only partly enforced, and spread here only among the unvaccinated. The cases were promptly isolated and quarantined and after desquamation was complete their wearing apparel, cloth furniture, carpets and bedding were burned, after which followed fumigation with formaldehyde gas and sulphur, with the result of checking the disease in each instance and confining it to the point of origin or development. All exposed persons were vaccinated or re-vaccinated.

The outbreak of diphtheria was threatening for several weeks, but was controlled by isolation, antitoxine and fumigation. Many of the cases were malignant in type, but responded readily to the liberal use of antitoxine. The prophylactic use of antitoxine was well proven, but its immunizing power seems to last not longer than one month.

The diphtheria was most virulent in the Eight ward among children who attended the Curtin school building and in that neighborhood. There had been fifteen cases of diphtheria during the summer in or about a partly covered ditch known as Spring Run, which had been receiving the house sewage of that locality for many years, so that the germs of the disease were in the soil, which had been permeated for years with sewage and garbage. The first marked outbreak occurred a short time after the city excavated a large portion of this foul ditch to build a covered sewer. After this the streets were again opened for the construction of a street railway, with the effect of reawakening the disease. There were cases in all parts of the city, but the disease never became epidemic. These cases could usually be traced to soil infection at or near their own homes. The warm weather of the early fall was a factor in the development of the germs in the soil.

The scarlet fever occurred mainly in the Sixth and Seventh wards and was spread by children going to school before desquamation was complete.

Contagious Diseases—1902—Williamsport.

	Typhoid.	Small-pox.	Diphtheria.	Scarlet fever.
January,	1	2	1	2
February,		4	1	3
March,	8		4	3
April,	1		1	10
May,	5		1	2
June,	4		15	2
July,	1		1	5
August,	8		3	4
September,	24		17	5
October,	7		42	21
November,	9		40	46
December,	4	2	17	23
Total,	71	8	143	133

Houses placarded for contagious diseases, 202.

Rooms fumigated with formaldehyde gas for contagious diseases, 286.

Garbage and refuse received at the dump, foot of Locust street (one and two-horse loads), 13,702.

Animals burned and buried, 143.

Nuisances reported and examined, 487.

Marriages.

There were 259 marriages in the city, of which one or both parties were citizens of Williamsport.

Births.

There were 249 births reported during the year. This is possibly one-half the real number, it being impossible to get the doctors to report these without subjecting them to a fine. There were, of those reported, 122 males, 127 females; white, 237, black, 12.

Deaths.

The following table shows the causes of death for the year. There were 386 deaths. Deducting 3 premature births, 3 suicides, 17 accidental deaths, the total deaths from illness was 363. Sixteen of these were from old age or senility.

Mortuary Report—Continued.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Inanition,	1							1	1		1		4
Intusception of bowels,				1									1
Intestinal obstruction, acute,				1									1
Injury to brain,								1					1
Intestinal stricture, cronic,								1					1
Indigestion,									1				1
La grippe,			1										1
Liver, sclerosis of,				1									1
Liver, hypertrophy of,			1		1		1						3
Locomotor ataxia,											1		1
Meningitis,	1	3		1	1	1	1	2	1		1		13
Multilocular cyst of ovary,						1							1
Marasmus,						1	1	4	1				7
Meningitis, cerebro-spinal,			1		1								2
Malarial fever,							1			1			2
Nephritis,	2			1									3
Nephritis, chronic,								1					1
Obstruction of bowels,		1											1
Old age,	2	2			4		3	2			2	1	16
Ovarian cyst,					1				1				2
Pernicious malaria,								1					1
Pneumonia,	5	6	5	4	3	3	1	1	2	3		4	37
Paralysis,		3	2	2	1							3	11
Paresis,					1								1
Peritonitis,			1	1			2				2		6
Premature birth,					1						1		2
Progressive pernicious anemia,								1					1
Rheumatism, inflammatory,	1												1
Rheumatism of heart,		1											1
Sclerosis of liver,											1		1
Shock, crushed leg,						1							1
Senile gangrene,						1							1
Shock,		1			1								2
Sarcoma,	1							1					2
Scrofula,		1											1
Softening of brain,							1						1
Spinal disease,										2			2
Typhoid fever,			1		1	1	1		3	2	3		12
Typhoid pneumonia,				1									1
Uraemia,									1				1
Ulcer of intestines,											2		2
Unknown,		1			1				1				3
Whooping cough,				1					1	1	1	2	6
Burned,							1				1		2
Electrocuted,							1						1
Drowned,								1					1
Railroad accident,		1	1					1	3				6
Suicide, drowning,			1										1
Accidental poisoning,								1					1
Suffocation,	1			1	1				1	1			5
Fracture of spine,											1		1
Opium poisoning,											1		1

Salary of secretary, \$180.00 per annum.

Salary of health officer, \$1,200.00 per annum.

Wysox, Bradford County.

Contagious diseases reported. House placarded and quarantined. Influenza and pneumonia have been unusually prevalent during the year, and a polluted water supply caused 8 cases of typhoid fever, one resulting fatally. Registration of vaccination of school children enforced.

Salary of sanitary agent, \$25.00 per annum.

Yeadon, Delaware County.

Contagious diseases reported. Houses placarded and quarantined. Registration partially enforced, including that of vaccination of school children.

Salary of secretary, \$360.00 per annum.

Salary of health officer, \$40.00 per annum.

York, York County.

Contagious diseases reported. Houses placarded and quarantined. Influenza and pneumonia have been unusually prevalent during the year and there have been 19 cases of small-pox with 6 deaths. Registration only partially enforced.

Salary of secretary, \$120.00 per annum.

Salary of health officer, \$480.00 per annum.

APPENDIX H.

LIST OF LOCAL BOARDS AND BUREAUS OF HEALTH IN PENNSYLVANIA.

1. Local Boards of Health, Arranged Alphabetically.
2. School Boards Acting as Boards of Health.
3. Boards of Township Commissioners Acting as Boards of Health.

LOCAL BOARDS OF HEALTH ARRANGED ALPHABETI- CALLY.

CITIES.

Name.	County.	Secretary, Health Officer or Superintendent.
Allegheny,	Allegheny,	Jas. A. McLaughlin, Supt. Bureau of Health.
Allentown,	Lehigh,	J. S. Magee, Secretary Board of Health.
Altoona,	Blair,	J. B. Anderson, Secretary Board of Health.
Bradford,	McKean,	J. A. Lindsey, Secretary Board of Health.
Carbondale, ..	Lackawanna, ..	Geo. W. Evans, Secretary Board of Health.
Chester,	Delaware,	L. G. Monroe, Secretary Board of Health.
Corry,	Erie,	Miss L. A. Whiteley, Secretary Board of Health.
Erie,	Erie,	G. M. Turner, Secretary Board of Health.
Easton,	Northampton, ..	H. Rute, Secretary Board of Health.
Franklin,	Venango,	E. Jeunet, Secretary Health Commissioners.
Harrisburg, ...	Dauphin,	M. G. Stoner, Chairman Sanitary Commission.
Hazleton,	Luzerne,	S. J. Hughes, Secretary Board of Health.
Johnstown, ...	Cambria,	F. H. Singer, Secretary Board of Health.
Lancaster,	Lancaster,	M. W. Raub, M. D., Secretary Board of Health.
Lebanon,	Lebanon,	Wm. L. Brunner, Secretary Board of Health.
Meadville,	Crawford,	J. G. Foster, Secretary Board of Health.
McKeesport, ..	Allegheny,	A. C. Wallace, Secretary Board of Health.
New Castle, ...	Lawrence,	W. H. Vance, Health Officer.
Oil City,	Venango,	John H. Nilsson, Secretary Board of Health.
Philadelphia, ..	Philadelphia, ..	Col. J. Lewis Good, President Board of Health.
Pittsburgh, ...	Allegheny,	A. J. Pitcairn, Supt. Bureau of Health.
Pittston,	Luzerne,	F. Battle, Secretary Board of Health.
Reading,	Berks,	J. N. Becker, M. D., Sec'y Board of Health.
Scranton,	Lackawanna, ..	Wm. Allen, M. D., Health Officer.
Titusville,	Crawford,	Wm. Varian, M. D., Sec'y Board of Health.
Wilkes-Barre, ..	Luzerne,	J. G. Meyers, Chairman Sanitary Committee.
Williamsport, ..	Lycoming,	C. W. Youngman, M. D., Health Officer.
York,	York,	F. X. Weil, M. D., Health Officer.

BOROUGH BOARDS OF HEALTH.

Name.	County.	Secretary.
Adamstown,	Lancaster,	
Alaquippa,	Beaver,	F. A. Reid.
Aldan, Adamsford P. O.,	Delaware,	R. E. Dickson.
Ambler,	Montgomery,	J. M. Haywood.
Annaville,	Lebanon,	
Apollo,	Armstrong,	J. G. Allison.
Arona,	Westmoreland,	P. D. Steiner.
Archbald,	Lackawanna,	Wm. Van Doren, M. D.
Arnold,	Westmoreland,	
Aspinwall,	Allegheny,	H. A. Hunker.

Name.	County.	Secretary.
Ashley,	Luzerne,	Iago Jones.
Atglen,	Chester,	H. H. Hamilton.
Attleboro (Eden P. O.), ..	Bradford,	P. H. Bigler.
Athens,	Bradford,	Miles Finch.
Attleboro, Eden P. O., ...	Bucks,	
Atwood,	Armstrong,	J. D. McLean.
Auburn,	Schuylkill,	W. B. Ketner.
Austin,	Potter,	C. L. Bradford, M. D.
Avalon,	Allegheny,	Thos. R. Perry.
Avondale,	Chester,	Fannie M. Valentine.
Bangor,	Northampton,	W. H. Reichard.
Barnesboro,	Cambria,	
Bath,	Northampton,	W. H. Landis.
Beaver,	Beaver,	Wm. C. French.
Beaver Falls,	Beaver,	T. G. McPherson, M. D.
Bechtelsville,	Berks,	
Bedford,	Bedford,	Geo. Diehl.
Bellefonte,	Centre,	H. C. Quigley.
Belle Vernon,	Fayette,	L. M. Truxal.
Bellevue,	Allegheny,	I. C. Welch, M. D.
Bellwood,	Blair,	
Beltzhoover,	Allegheny,	H. F. Byrom.
Ben Avon,	Allegheny,	A. L. Large.
Bendersville,	Adams,	D. P. Delap.
Bennett,	Allegheny,	
Benton,	Columbia,	John F. Wright.
Berlin,	Somerset,	Z. T. Kimmel.
Berrysburg,	Dauphin,	E. W. Holtzman.
Berwick,	Columbia,	J. W. Evans.
Bethlehem,	Northampton,	Jos. M. Leibert, Jr.
Big Run,	Jefferson,	J. C. Cochrane, M. D.
Birdsboro,	Berks,	Leroy Hengst.
Blairsville,	Indiana,	A. T. Rutledge, M. D.
Blakeley, Peckville P. O.,	Lackawanna,	Leander B. Thompson.
Bloomfield, New Bloom-		
field P. O.,	Perry,	Wm. S. Seibert.
Bloomsburg,	Columbia,	W. M. Reeber, M. D.
Blossburg,	Tioga,	James A. Shaw.
Bolivar,	Westmoreland,	Jos. B. Hammond.
Boyetown,	Berks,	Chas. B. Spatz.
Braddock,	Allegheny,	S. D. Hamilton.
Bridgeport,	Montgomery,	I. Percy Hart.
Bridgeville,	Allegheny,	S. W. Patton.
Bristol,	Bucks,	Jesse O. Thomas.
Brockwayville,	Jefferson,	G. W. Sibley.
Brookville,	Jefferson,	C. P. O'Loughlin.
Brownsville,	Fayette,	M. R. Brashur.
Brushton,	Allegheny,	Geo. McKee, Jr.
Bunker Hill, Morris Cross		
Roads P. O.,	Fayette,	J. H. Johnson.
Burgettstown, So. Bur-		
gettstown P. O.,	Washington,	William Melvin.

Name.	County.	Secretary.
Burlington,	Bradford,	C. T. Kellogg.
Burnside,	Clearfield,	James Dowler, clerk.
Butler,	Butler,	R. B. Fowzer.
Cadwallader,	Fayette,	
California,	Washington,	W. M. Hurt.
Cambridgeboro,	Crawford,	
Camp Hill,	Cumberland,	A. L. Shope, M. D.
Canonsburg,	Washington,	
Canton,	Bradford,	Chas. E. Bullock.
Carlisle,	Cumberland,	Geo. M. Hays.
Carmichaels,	Greene,	T. J. Cragg.
Carnegie,	Allegheny,	R. J. Hardy.
Carrolltown,	Cambria,	J. V. Mancher, M. D.
Casselman,	Somerset,	
Catasauqua,	Lehigh,	A. A. Glick.
Catawissa,	Columbia,	R. M. Graham.
Centralla,	Columbia,	B. I. Curran.
Centre Hall,	Centre,	R. D. Foreman.
Centreville, Slippery Rock		
P. O.,	Butler,	I. M. McClymonds.
Centreville,	Crawford,	T. J. Patton.
Chambersburg,	Franklin,	D. O. Gehr.
Charleroi,	Washington,	I. L. Nickerson.
Cherrytree, Grant P. O., ..	Indiana,	J. H. Peterman, M. D.
Chester Hill,	Clearfield,	
Chestnut Hill, Wigton P.		
O.,	Clearfield,	Hiram Shultz.
Clarksville,	Mercer,	S. H. Hawthorn.
Clarion,	Clarion,	J. W. Greenland.
Clayville,	Jefferson,	J. W. Stauffer.
Claysville,	Washington,	H. H. McDonough, M. D.
Clearfield,	Clearfield,	W. A. Hagerty.
Clifton Heights,	Delaware,	J. H. Cooper.
Clintonville,	Venango,	T. M. Hoffman.
Coalmont,	Huntingdon,	Jno. W. Lytle.
Coalport,	Clearfield,	Wm. Templeton.
Coaldale, Six Mile Run		
P. O.,	Bedford,	
Coatesville,	Chester,	S. W. Swing.
Cochranton,	Crawford,	J. Milliron.
Cokeville,	Westmoreland,	J. S. Cummings.
College Hill, Beaver Falls		
P. O.,	Beaver,	
Collegeville,	Montgomery,	John H. Bartma.
Collingdale,	Delaware,	R. Walter Beatty.
Columbia,	Lancaster,	H. P. Clepper.
Colwyn,	Delaware,	F. C. Biles.
Conemaugh,	Cambria,	W. E. Shaffer.
Confluence,	Somerset,	
Connellsville,	Fayette,	James Echard.
Conshohocken,	Montgomery,	S. B. Woodward.
Conway (Agnew P. O.), ..	Beaver,	J. A. Fairman.

Name.	County.	Secretary.
Coopersburg,	Lehigh,	Henry F. Trumbaeur.
Coopersdale,	Johnstown	
P. O.,	Cambria,	Alex. McDonald.
Cooperstown,	Venango,	B. T. Grove.
Coplay,	Lehigh,	V. H. Weaver.
Coraopolis,	Allegheny,	J. D. Hamilton.
Coulterville,	Allegheny,	James M. Love.
Coudersport,	Potter,	W. P. Moon, M. D.
Courtdale,	Luzerne,	
Crafton,	Allegheny,	E. W. McCort.
Crossona,	Schuylkill,	John W. Smith.
Curwensville,	Clearfield,	W. P. Tate.
Dallas,	Luzerne,	W. H. Capwell.
Dallastown,	York,	H. Q. Sechrist.
Dalton,	Lackawanna,	A. G. Ives.
Danville,	Montour,	A. C. Shultz, M. D.
Darby,	Delaware,	C. R. Black.
Dauphin,	Dauphin,	E. E. McKissick.
Dawson,	Fayette,	
Dayton,	Armstrong,	Miss T. E. Lindsay.
Delaware Water Gap, ...	Monroe,	John J. Burd.
Delta,	York,	J. T. Heaps.
Derry Station,	Westmoreland,	
Dickson City,	Priceburg	
P. O.,	Lackawanna,	John N. Snyder.
Dillsburg,	York,	H. W. Fishel.
Dorranceton,	Luzerne,	B. E. Ransom.
Downingtown,	Chester,	Thos. E. Park, M. D.
Doylestown,	Bucks,	C. D. Hotchkiss.
Driftwood,	Cameron,	J. S. Johnson.
DuBois,	Clearfield,	W. J. Smathers, M. D.
Du Boistown,	Lycoming,	C. C. Brown.
Dudley,	Huntingdon,	
Dunbar, P. O. Box 71, ...	Fayette,	J. N. Anderson.
Duncannon,	Perry,	Chas. L. DePugh.
Dundoff,	Susquehanna,	G. A. Luke, M. D.
Dunvansville,	Blair,	
Dunlo,	Cambria,	
Dunmore,	Lackawanna,	P. H. Cooney.
Duquesne,	Allegheny,	Wm. J. Filcer.
Duryea,	Luzerne,	A. J. Baker.
Dushore,	Sullivan,	
Eaglesmere,	Sullivan,	
East Bangor,	Northampton,	Benj. H. Bellis.
East Berlin,	Adams,	J. L. Hildebrand.
East Bethlehem,	Northampton,	
East Brady,	Clarion,	R. Robinson, M. D.
East Greensburg,	Greens-	
burg, P. O.,	Westmoreland,	
East Greenville,	Montgomery,	G. A. Momeyer.
East Mauch Chunk,	Carbon,	J. Ed. Waaser.

Name.	County.	Secretary.
East McKeesport, Wil-		
merding P. O.,	Allegheny,	Wm. H. Ilgenfritz.
East Stroudsburg,	Monroe,	E. M. Walter.
East Sunbury,	Northumberland,	
Ebensburg,	Cambria,	H. A. Englehart.
Eddystone,	Delaware,	Wm. Whittaker.
Edenburg, Knox P. O., ..	Clarion,	E. W. Crabbe.
Edgewood, Edgewood,		
Park P. O.,	Allegheny,	R. F. Emery.
Edinborough,	Erie,	J. W. Niles.
Edwardsville,	Luzerne,	M. Dando.
Eldred,	McKean,	E. A. Barden.
Elizabeth,	Allegheny,	S. W. Martin.
Elizabethtown,	Lancaster,	C. G. Reese.
Elizabethville,	Dauphin,	Chas. Potter.
Elkland,	Tioga,	R. T. Wood.
Elliott,	Allegheny,	R. S. Donahoo, M. D.
Ellwood City,	Lawrence,	O. S. Morrow.
Elmhurst,	Lackawanna,	J. H. Snyder, M. D.
Emaus,	Lehigh,	W. H. Unangst.
Emlenton,	Venango,	D. A. Crawford.
Emporium,	Cameron,	Geo. Metzger, Jr.
Emsworth,	Allegheny,	J. L. Kidd.
Ephrata,	Lancaster,	F. S. Klinger.
Esplen, 404 3d st., Pitts-		
burgh,	Allegheny,	E. J. Sutherland.
Evans City,	Butler,	Albert Lotz.
Exeter, Pittston P. O., ..	Luzerne,	T. P. Markin.
Factoryville,	Wyoming,	W. E. Manchester.
Fairchance,	Fayette,	R. T. Gribble.
Fall Brook,	Tioga,	H. J. Buman.
Fallston,	Beaver,	Walter Husan.
Fayette City,	Fayette,	
Fleetwood,	Berks,	Amandus Kern.
Flemington,	Clinton,	Geo. A. Beck, M. D.
Ford City,	Armstrong,	A. W. Bressland.
Forest City,	Susquehanna,	L. H. May.
Forksville,	Sullivan,	Geo. C. Wright.
Forkville,	Schuylkill,	T. C. Williams.
Forty Fort,	Luzerne,	H. H. Hadsall.
Fountain Hill (South	Lehigh,	Harry Clark.
Bethlehem P. O.).		
Frackville,	Schuylkill,	M. Heywood.
Franklintown,	York,	
Fredonia,	Mercer,	A. G. Reigelman.
Freedom,	Beaver,	J. Bishoffberger.
Freeland,	Luzerne,	Stephen Drather.
Freemansburg,	Northampton,	W. R. Roberts.
Freeport,	Armstrong,	S. W. Schnatterly, M. D.
Gallitzin,	Cambria,	E. T. Bradley, M. D.
Geneva,	Crawford,	G. H. Walp.

Name.	County.	Secretary.
Gettysburg,	Adams,	J. Frank Dougherty.
Gilberton,	Schuylkill,	Michael McCool.
Girard,	Erie, W. Wheaton.	
Girardville,	Schuylkill,	Michael B. Carden.
Glen Campbell,	Indiana,	J. Maquilken.
Glendon, Easton P. O., ..	Northampton,	O. F. Kelchner.
Glenfield,	Allegheny,	John W. Winters.
Glen Hope,	Clearfield,	C. J. Keagy.
Glenoiden,	Delaware,	Fred. M. Bonsall.
Glen Rock,	York,	I. J. Young.
Goldsboro,	York,	R. P. Stronginger.
Gordon,	Schuylkill,	G. H. Uhler.
Gramplan,	Clearfield,	L. C. Norris.
Grand Valley,	Warren,	
Great Bend,	Susquehanna,	
Greencastle,	Franklin,	Watson R. Davison.
Green Lane,	Montgomery,	Henry W. Graul.
Greensboro,	Greene,	E. W. Shaffer.
Greensburg,	Westmoreland,	R. Alcorn.
Greenville,	Mercer,	H. L. Keck.
Grove City,	Mercer,	R. N. Allison.
Hallfax,	Dauphin,	A. H. Putt.
Hallsted,	Susquehanna,	A. F. Merrell, M. D.
Hamburg,	Berks,	
Hanover, Nanticoke P. O.,	Luzerne,	Lorin A. Rohrbaugh.
Hanover,	York,	Irwin S. Ditzler.
Harmony,	Butler,	
Hartstown,	Crawford,	
Hastings,	Cambria,	I. P. Yahner.
Hatboro,	Montgomery,	Reuben Hockman.
Hatfield,	Montgomery,	F. H. Reaser.
Hawley,	Wayne,	V. A. Decker.
Hazel Dell,	Lawrence,	R. A. Morrow.
Hellertown,	Northampton,	
Hollidaysburg,	Blair,	Robt. W. Smith.
Homer City,	Indiana,	J. G. Campbell.
Homestead,	Allegheny,	J. H. Williams.
Honesdale,	Wayne,	Fred. W. Powell, M. D.
Honey Brook,	Chester,	S. M. Lemmon.
Hopbottom,	Susquehanna,	N. M. Finn.
Houtzdale,	Clearfield,	John Tyler.
Hughestown, Pottstown		
P. O.,	Luzerne,	
Hughesville,	Lycoming,	W. C. Frantz.
Hulmeville,	Bucks,	
Huntingdon,	Huntingdon,	J. R. Patton.
Hydetown,	Crawford,	
Hyndman,	Bedford,	
Indiana,	Indiana,	John H. Hill.
Iona,	Lebanon,	
Irvona,	Clearfield,	J. C. Gordon.

Name.	County.	Secretary.
Jamestown,	Mercer,	E. J. McCartney, D. D. S.
Jeanette,	Westmoreland,	J. C. Cribbbs.
Jeddo,	Luzerne,	W. H. Smith.
Jefferson,	Greene,	J. S. Smith, M. D.
Jenkindtown,	Montgomery,	J. G. Frank.
Jermyn,	Lackawanna,	S. D. Davis, M. D.
Johnsonburg,	Elk,	H. H. Smith.
Jonestown,	Lebanon,	S. J. Woelfly.
Junlata,	Blair,	P. E. Bishop.

Kane,	McKean,	H. K. Shaffer.
Kennett Square,	Chester,	Frank L. Beeby.
Kingston,	Luzerne,	Albert E. Miller.
Kinzua,	Warren,	J. J. Knapp.
Kipple, Juniata P. O., ..	Blair,	U. G. Pheasant.
Kittanning,	Armstrong,	T. N. McKee, M. D.
Knoxville,	Allegheny,	W. D. Grimes.
Kutztown,	Berks,	I. L. Peters, M. D.

Lackawaxen,	Pike,	
Lafin,	Luzerne,	
Landingville,	Schuylkill,	Geo. A. Delberd.
Lanesboro,	Susquehanna,	Jacob Pendorf.
Langhorne,	Bucks,	J. B. Stackhouse.
Lansdale,	Montgomery,	S. P. Luse, M. D.
Lansdowne,	Delaware,	Chas. H. Dix, M. D.
Lansford,	Carbon,	I. I. Stickler.
La Porte,	Sullivan,	Dr. C. F. Wackenuth.
La Plume,	Lackawanna,	Geo. Sisson.
Latrobe,	Westmoreland,	J. C. B. Stockberger.
Lawrenceville,	Tioga,	David Craft.
Leechburg,	Armstrong,	E. Bredin.
Leighton,	Carbon,	S. R. Gilham.
Le Raysville,	Carbon,	F. M. Wheaton.
Lewisburg,	Union,	T. C. Thornton, M. D.
Lewistown,	Mifflin,	A. T. Hamilton, M. D.,
		H. O.

Lewisville, Ulysses P. O.,	Potter,	Homer K. Lane.
Liberty,	Tioga,	Daniel Schartle.
Ligonier,	Westmoreland,	E. E. McAdoo, M. D.
Lilly,	Cambria,	N. P. Carney.
Lindsey,	Jefferson,	W. A. Johnston.
Linesville,	Crawford,	A. A. Graff.
Littitz,	Lancaster,	Israel G. Erb.
Little Meadows,	Susquehanna,	A. Graves.
Littlestown,	Adams,	E. E. Taylor.
Lock Haven,	Clinton,	N. B. Dorey.
Lockport, Treachlers P.		
O.,	Northampton,	H. S. Barnes.
Lockport, Plateau P. O.,	Erle,	
Logansville,	York,	C. G. Hildebrand.
Loganton,	Clinton,	A. L. Heller.

Name.	County.	Secretary.
Ludwick, Greensburg P.		
O.,	Westmoreland,	Wm. J. Row.
Luzerne,	Luzerne,	W. W. Grover.
Lykens,	Dauphin,	J. J. John.
McAdoo,	Schuylkill,	I. F. Carlin.
McConnellsburg,	Fulton,	M. R. Shaffner.
McDonald,	Washington,	I. C. Harper.
McEwensville,	Northumberland,	
McKees Rocks,	Allegheny,	Geo. W. Brown.
McSherrytown,	Adams,	Geo. L. Rice.
Mehaffy,	Clearfield,	Guy E. Conrath.
Mahoningtown,	Lawrence,	
Mahanoy City,	Schuylkill,	John M. Coombe.
Mainesburg,	Tioga,	
Malvern,	Chester,	Caleb H. Malin.
Manchester,	York,	
Manheim,	Lancaster,	J. W. Boyd.
Mann's Choice,	Bedford,	John R. Faust, M. D.
Manor Station,	Westmoreland,	W. J. Kemerer.
Manorville,	Armstrong,	
Mansfield,	Tioga,	Frank W. Clark.
Mansfield,	Allegheny,	
Mapleton,	Huntingdon,	
Marcus Hook, Linwood		
P. O., Box 42,	Delaware,	R. T. W. Pechmann.
Marietta,	Lancaster,	J. W. Riff.
Marklesburg,	Fayette,	
Markleysburg,	Huntingdon,	
Marysville,	Perry,	D. Vandyke.
Masontown,	Bradford,	
Mauch Chunk,	Carbon,	Robert A. Heberling.
Mayfield,	Lackawanna,	W. J. Bergan.
Mechanicsburg,	Cumberland,	E. M. Anderson.
Media,	Delaware,	Linnaeus Fussell, M. D.
Mehoopany,	Wyoming,	
Mercersburg,	Franklin,	
Mercer,	Mercer,	J. M. Campbell.
Meshoppen,	Wyoming,	F. W. Pneuman.
Meyersdale,	Somerset,	W. A. Shoemaker.
Middletown,	Dauphin,	
Mifflinburg,	Union,	John A. Beard.
Mifflintown,	Juniata,	L. P. Walley, M. D.
Milesburg,	Centre,	A. G. Roger.
Millersburg,	Dauphin,	J. F. Bowman.
Milford,	Pike,	J. H. Van Etten.
Millerstown, Chicora P.		
O.,	Butler,	P. A. Rattigan.
Mill Hall,	Clinton,	Jno. B. McCloskey.
Millheim,	Centre,	E. O. Hosterman.
Millvale, Bennett P. O.,	Allegheny,	Clyde Davis.
Mill Village,	Erie,	
Millville,	Columbia,	Harry W. Eves.

Name.	County.	Secretary.
Milton,	Northumberland,	J. S. Dougal.
Miners' Mills,	Luzerne,	John Hislop, M. D.
Minersville,	Schuylkill,	C. H. Phillips.
Monaca,	Beaver,	J. R. Gormley, M. D.
Monessen,	Westmoreland,	R. S. Keely.
Monongahela,	Washington,	John W. Piatt.
Monroeton,	Bradford,	C. G. Summus.
Montgomery,	Lycoming,	
Montooth,	Allegheny,	Wm. Ott.
Montoursville,	Lycoming,	David Updegraff.
Montrose,	Susquehanna,	H. P. Read.
Morton,	Delaware,	W. H. Newlan.
Mount Carbon,	Schuylkill,	M. A. Goulden.
Mount Carmel,	Northumberland,	L. P. Parry.
Mount Jewett,	McKean,	Chas. Oberg.
Mount Oliver,	Allegheny,	
Mount Pleasant,	Westmoreland,	S. C. Stevenson.
Mount Union,	Huntingdon,	
Muncy,	Lycoming,	
Munhall,	Allegheny,	A. P. Fogelman.
Nanticoke,	Luzerne,	Jos. Smith.
Narberth,	Montgomery,	A. P. Redifer.
Nazareth,	Northampton,	Frank Huth.
Nelson,	Tioga,	O. B. Blanchard.
Nescopeck,	Luzerne,	E. B. Ludwig.
New Albany,	Bradford,	
Newberry,	Lycoming,	
New Bloomfield,	Perry,	Wm. S. Seibert.
New Brighton,	Beaver,	J. P. Edgar.
Newburgh,	Cumberland,	D. C. Burkholder.
New Centreville,	Chester,	
New Centreville, Glade P. O.,	Somerset,	
New Cumberland,	Cumberland,	G. G. Guistwhite.
New Florence,	Westmoreland,	
New Freedom, *	York,	A. Rechling.
New Haven,	Fayette,	Eugene O'Donovan.
New Kensington,	Allegheny,	F. L. Moorhead.
New Lebanon,	Mercer,	S. S. Overmoyer.
New Milford,	Susquehanna,	
New Oxford,	Adams,	
Newport,	Perry,	
New Salem,	Westmoreland,	
Newton Hamilton,	Mifflin,	
Newtown,	Bucks,	J. A. Crewitt, M. D.
Newville,	Cumberland,	W. B. Reynolds, M. D.
New Washington,	Clearfield,	
New Wilmington,	Lawrence,	R. J. Totten.
Nicholson,	Wyoming,	Geo. F. Sprague.
Norristown,	Montgomery,	J. Allen Barrett, H. O.
North Belle Vernon,	Fayette,	Rev. P. Baker.
North Clarendon,	Warren,	J. W. Hamilton.

Name.	County.	Secretary.
North East,	Erie,	N. H. Clark.
North Irwin, Irwin P. O.,	Westmoreland,	John F. McDonald.
Northumberland,	Northumberland,	I. G. Dieffenbach.
North Wales,	Montgomery,	E. M. Michener.
North York (York),	York,	W. D. Landes.
Norwood,	Delaware,	F. H. Bassett.
Oakdale,	Allegheny,	J. R. McMichael.
Oakland, Susquehanna P. O.,	Susquehanna,	William Johnston.
Oakmont, Verona P. O.,	Allegheny,	W. H. Cooper, M. D.
Ohioville,	Fayette,	O. F. M. Nicolay.
Old Forge, Rendham P. O.,	Lackawanna,	
Olyphant,	Lackawanna,	John J. Carbine.
Orbisonia,	Huntingdon,	
Orrstown,	Franklin,	
Orwigsburg,	Schuylkill,	W. H. Edwards.
Osceola Mills,	Clearfield,	H. A. Albert.
Oswego,	Potter,	H. B. Payne.
Oxford,	Chester,	J. R. Strickland.
Palo Alto,	Schuylkill,	Alex. Govan.
Parker's Landing,	Armstrong,	
Parkesburg,	Chester,	Amos Strickland.
Parnassus,	Westmoreland,	R. M. Alter, M. D.
Parsons,	Luzerne,	
Patterson,	Juniata,	
Patton,	Cambria,	G. H. Curfman.
Peckville,	Lackawanna,	S. M. Rogers.
Pen Argyl,	Northampton,	G. N. Swartz, M. D.
Penbrook,	Dauphin,	
Penn, Penn's Station P. O.,	Westmoreland,	J. B. Smith.
Perkasie,	Bucks,	Harry E. Grim.
Petersburg,	Huntingdon,	Jos. Creswell.
Petrolia,	Butler,	James M. Hawk.
Phillipsburg,	Centre,	F. E. Irwin.
Phoenixville,	Chester,	I. E. Miller.
Picture Rocks,	Lycoming,	Chas. W. Longbay.
Pine Grove,	Schuylkill,	M. M. Dieffenbach.
Pleasantville, Alum Bank P. O.,	Bedford,	Scott U. Hammer.
Pleasantville,	Venango,	W. D. Beebe.
Plymouth,	Luzerne,	R. J. Williams, M. D.
Point Marion,	Fayette,	W. L. Dillinger.
Polk,	Jefferson,	E. J. Hutchinson.
Port Alleghany,	McKean,	W. H. Keeny.
Port Carbon,	Schuylkill,	A. S. Templen.
Portland,	Northampton,	C. E. Beck.
Port Royal,	Juniata,	C. B. M. Kepler.
Pottstown,	Montgomery,	John B. Evans.
Pottsville,	Schuylkill,	Frank Little.

Name.	County.	Secretary.
Prompton,	Wayne,	
Prospect Park, Monroe P.		
O.,	Delaware,	A. C. N. Schneider, M. D.
Punxsutawney,	Jefferson,	E. S. Swartz.
Quakertown,	Bucks,	John V. Ommeren.
Rainsburgh,	Bedford,	F. A. Smith.
Rankin Station,	Allegheny,	W. H. Gordon, M. D.
Red Lion,	York,	A. H. Baker.
Reno,	Venango,	
Renovo,	Clinton,	John W. Russell.
Reynoldsville,	Jefferson,	L. J. McEntire.
Richlandtown,	Bucks,	C. H. Rapp.
Ridgway,	Elk,	James Penfield.
Ridley Park,	Delaware,	Frank D. Kane.
Rimersburg,	Clairon,	C. A. Wise.
Riverside,	Northumberland,	Zachary T. Arms.
Roaring Spring,	Blair,	W. L. Spanogle.
Rochester,	Beaver,	Frank R. Noss.
Rockhill Furnace,	Huntingdon,	W. M. Chilcoat.
Rockledge, Foxchase P.		
O., Philadelphia,	Montgomery,	Harry Goebel.
Rockton,	Clearfield,	W. B. Duff.
Rockwood,	Somerset,	
Rome,	Bradford,	M. W. Rice, Clerk.
Roxbury,	Franklin,	W. S. Krise.
Royalton,	Dauphin,	
Royersford,	Montgomery,	A. P. Cox.
Rutledge,	Delaware,	G. Allston Brown.
Saegertown,	Crawford,	
Salem, Delmont,	Westmoreland,	
Sallsbury, Elk Lick P. O., Somerset,		
Salladasburg,	Lycoming,	C. B. Bastian, M. D.
Saltsburg,	Indiana,	J. C. Moore.
Sandy Lake,	Mercer,	Herbert H. Knapp.
Saxton,	Bedford,	J. A. Coult.
Sayre,	Bradford,	Wm. C. Barbour.
Scalp Level,	Blair,	Charles S. Davis.
Schuylkill Haven,	Schuylkill,	Geo. W. Gise.
Scottdale,	Westmoreland,	W. H. Fetter, M. D.
Sellingsgrove,	Snyder,	E. R. Robach.
Sewickley,	Allegheny,	T. E. Wakeham.
Shamokin,	Northumberland,	C. F. Heim.
Sharon,	Mercer,	W. Whitehead.
Sharon Hill,	Delaware,	J. G. Geissell.
Sharpsburg,	Allegheny,	Edward Krauss.
Sharpsville,	Mercer,	T. M. Ford.
Sheakleyville,	Mercer,	J. C. Bachop, M. D.
Sheffield,	Warren,	H. A. Pinney.
Shelocta,	Indiana,	S. M. Lowman.
Shenandoah,	Schuylkill,	J. W. Curtin.

Sheraden, Sheridanville

P. O.,	Allegheny,	C. A. Stevenson.
Shickshinny,	Luzerne,	E. S. Stackhouse.
Shippensburg,	Cumberland,	H. C. Angle.
Shippensburg,	Clarion,	H. S. Lockhart.
Silverdale,	Bucks,	
Six Mile Run,	Bedford,	J. G. Jamison.
Siverly,	Venango,	C. W. Downing.
Slatington,	Lehigh,	
Slippery Rock,	Butler,	S. M. McClymonds.
Smethport,	McKean,	
Somerset,	Somerset,	W. B. Shafer.
Smithfield,	Fayette,	
Souderton,	Montgomery,	
South Bethlehem,	Northampton,	J. Harry Kresge.
South Canonsburg,	Washington,	L. D. Donaldson.
South Chester, Thurlow		
P. O.,	Delaware,	William N. Erskine.
South Easton, Easton P.		
O.,	Northampton,	J. S. Aldridge.
South Greensburg, Greens-		
burg P. O.,	Westmoreland,	John J. Weaver.
South Renovo,	Clinton,	T. M. C. Beck.
South Washington, Wash-		
ington P. O.,	Washington,	Isaac M. Wells.
South Waverly,	Bradford,	
Southwest Greensburg,		
Greensburg P. O.,	Westmoreland,	John T. Haines.
Spangler,	Cambria,	Milton Spencer.
Spartansburg,	Crawford,	
Springboro,	Crawford,	
Spring City,	Chester,	J. C. Mewhinney, M. D.
Spring Garden,	Allegheny,	
Spring Grove, Spring		
Forge P. O.,	York,	G. W. Bahn, M. D.
St. Clair,	Schuylkill,	B. P. Urch.
St. Clairsville,	Bedford,	
Steelton,	Dauphin,	J. M. Peters, M. D.
Stoneboro,	Mercer,	H. M. Tarr.
St. Petersburg,	Clarion,	
Stoyestown,	Somerset,	M. H. Baker, M. D.
Strasburg,	Lancaster,	Geo. E. Day, M. D.
Strattonville,	Clarion,	S. R. Whitehall.
Stroudsburg,	Monroe,	W. E. Gregory, M. D.
Sugar Grove,	Warren,	E. D. McKee.
Sugar Notch,	Luzerne,	David Lewis.
Summer Hill,	Cambria,	
Summerville,	Jefferson,	
Summit Hill,	Carbon,	John Evans.
Sunbury,	Northumberland,	W. W. Druckemiller.
Susquehanna,	Susquehanna,	D. J. Lynch.
Swarthmore,	Delaware,	J. P. Strieby, M. D.
Sylvania,	Bradford,	

Name.	County.	Secretary.
Tamaqua,	Schuylkill,	Geo. S. Noll.
Tarentum,	Allegheny,	F. A. Ready.
Target,	Westmoreland,	
Taylor,	Lackawanna,	Wm. T. Davis.
Telford,	Montgomery,	F. H. Strohm,
Thompsontown,	Forest,	H. W. Wickersham.
Throop,	Lackawanna,	John Evans.
Tidloute,	Warren,	John Siggins.
Tioga,	Tioga,	F. B. Smith.
Tionesta,	Forest,	T. F. Ritchey.
Topton,	Berks,	Chas. D. Werley, M. D.
Towanda,	Bradford,	R. G. Rice, M. D.
Tower City,	Schuylkill,	James Doyle.
Townville,	Crawford,	Harry Hatch, Ph. G.
Tremont,	Schuylkill,	Fred. Simmendinger.
Troy,	Bradford,	P. N. Barker, M. D.
Tullytown,	Bucks,	Henry S. Harding.
Tunkhannock,	Wyoming,	Henry Harding.
Turbotville,	Northumberland,	D. W. Dennis.
Tunnel Hill, Gallitzin P. O.,	Cambria,	Richard Byrne.
Turtle Creek,	Allegheny,	John T. C. Bowman.
Tyrone,	Blair,	E. M. Taylor.
Ulysses,	Potter,	
Upland,	Delaware,	Edwin Wolfenden.
Upper Lehigh,	Luzerne,	A. C. Lelsenring.
Ursina,	Somerset,	
Union City,	Erle,	L. D. Rockwell.
Uniondale,	Susquehanna,	
Unionville, Fleming P. O., Centre,		R. S. Cambridge.
Vallonia,	Crawford,	
Vandergrift Heights, Van- degrift P. O.,	Westmoreland,	J. A. Boarle, M. D.
Venango,	Crawford,	
Verona,	Allegheny,	T. J. Miller.
Versailles,	Allegheny,	John Grainger.
Wallaceton,	Clearfield,	
Warren,	Warren,	F. A. Steber.
Washington,	Washington,	Ed. R. Smith, Jr.
Washingtonville,	Montour,	C. S. Moser.
Waterford,	Erle,	J. A. Bolard.
Watsonstown,	Northumberland,	W. G. Marsh.
Waverly,	Lackawanna,	
Waymart,	Wayne,	Charles H. Stephenson.
Waynesboro,	Franklin,	Alfred N. Russell.
Waynesburg,	Greene,	W. W. Evans.
Weatherly,	Carbon,	J. F. Rosenstock.
Weissport,	Carbon,	W. H. Strausberger.
Wellsboro,	Tioga,	Anton Hardt.
Wells Tannery,	Fulton,	W. H. Bumgardner.

Name.	County.	Secretary.
West Bethlehem,	Northampton,	G. F. Metzger.
West Bridgewater,	Beaver,	Harvey Brown.
West Chester,	Chester,	Charles E. Woodward.
West Conshohocken,	Montgomery,	J. Rufus Barr.
West Easton,	Northampton,	John Schug.
West Elizabeth,	Allegheny,	J. C. Donaldson.
Westfield,	Tioga,	
West Hazleton,	Luzerne,	W. M. McAvoy.
West Indiana, Indiana P. O.,	Indiana,	Jas. H. St. Clair.
West Kittanning,	Armstrong,	J. L. Boney.
West Liberty, Mt. Leba- non P. O.,	Allegheny,	
West Middlesex,	Mercer,	C. M. Grace.
West Millville, Hawthorn P. O.,	Clarion,	J. J. Wolfe.
Westmont, Johnstown P. O.,	Cambria,	J. W. Carter.
West New Castle, New Castle P. O.,	Lawrence,	Isaac B. Griffith.
West Newton,	Westmoreland,	A. T. Darr.
West Pittston, Pittston P. O.,	Luzerne,	J. S. Hileman, M. D.
West Telford,	Montgomery,	H. J. Wampole.
West Washington,	Washington,	Chas. F. Segner.
White Haven,	Luzerne,	
Wilkinsburg,	Allegheny,	B. F. Shafer.
Williamsburg,	Blair,	
Williamstown,	Dauphin,	A. D. Zimmerman.
Willmerding,	Allegheny,	H. D. Patch.
Wilmore,	Cambria,	P. M. Brown.
Wind Gap,	Northampton,	J. C. Keller, M. D.
Winterstown,	York,	C. L. Freas, M. D.
Winton,	Lackawanna,	
Worthington,	Armstrong,	
Worthville,	Jefferson,	W. H. Smith.
Wrightsville,	York,	W. H. Flora.
Wyalusing,	Bradford,	H. H. Sensabaugh.
Wyoming,	Luzerne,	C. W. Stiff.
Yardley,	Bucks,	E. E. Yeager.
Yatesville, Yates P. O.,	Luzerne,	
Yeadon,	Delaware,	John J. Boyd.
York Haven,	York,	Henry F. Metzler.
Yorkville, Pottsville P. O.,	Schuylkill,	M. F. Fitzpatrick.
Youngsville,	Warren,	E. L. Morris.
Zellenople,	Butler,	Ferd. Zehner.

LIST OF SCHOOL BOARDS ACTING AS BOARDS OF HEALTH.

Under the Act of April 11, A. D. 1899.

School District.	Postoffice.	County.	Secretary or Agent.
Abington township,	Willow Grove,	Montgomery Co.,	
Allegheny township,	Leechburg,	Armstrong Co.,	H. S. Zimmerman.
Antrim township,	Worleytown,	Franklin Co.,	
Allen township,	Allenport P. O.,	Washington Co.,	T. D. Pippins.
Banks township,	Colerain,	Carbon Co., ...	C. Roarty.
Bart township,	Lancaster	Co.,	
Benezette township,	Benezette,	Elk Co.,	A. N. Cummings.
Black Lick township,	Belsano,	Cambria Co., ...	E. M. Moody.
Bowmanstown township,		Carbon Co.,	
Bradford township,	Bradford,	Bradford Co.,...	B. L. Brinton.
Bridgeport, Ind. School	Stauffer P. O.,	Westmore-	
District township.	land Co.,		E. E. Slonecker.
Brownsville township, ...	Brownsville,	Fayette Co.,	James Roberts.
Canoe township,	Indiana	Co.,	
Cartwright township,	Elk	Co.,	
Chartiers township,	Idlewood,	Allegheny Co.,...	John P. Reinecke.
Corydon township,	Corydon,	Warren Co., ..	C. E. Flatt.
Coal township,	Shamokin,	Northumber-	
	land Co.,		Albert De Long.
Crescent township,	Shonestown	Allegheny	
	Co.,		
Coolbough township,	Tobyhanna,	Monroe Co.,...	Dr. G. H. Rhoads.
Cresson township,	Cresson, P. O. Box 11.		
	Cambria Co.,		J. J. Burgoon.
Easttown township,	Berwyn,	Chester Co., ...	F. L. Richards.
East Bradford,	West Chester,	Chester Co.,...	E. H. C. Howell.
East Deer,	Hites,	Allegheny Co., ...	Geo. A. Dick.
East Hempfield township,	Landisville,	Lancaster	
	Co.,		S. N. Mumma.
Economy township,	Economy,	Beaver Co., ...	
Eldred township,	Sigel,	Jefferson Co.,	J. E. Newcome.
Elizabeth township,	Elizabeth,	Allegheny Co.,	W. J. Cassidy.
Farmington township, ...	Leeper,	Delaware Co., ...	Albert Foy.
Gilpin township,	Leechburg,	Armstrong Co.	
Greenfield township,	Bascobel,	Erie Co.,	B. Wildman.
Greenwood township,	Geneva,	Crawford Co., ..	Cyrus McMichael.

School District.	Postoffice.	County.	Secretary or Agent.
Gwynned,	North Wales,	Montgomery	
	Co.,		Dr. H. F. Slifer.
Hanover,	Hanlin,	Washington Co.,	W. P. Curry.
Harbor Creek township,	Erie,	Erie Co.,	R. B. Farren.
Harmony township,	Economy,	Beaver Co., ..	Chas. A. Lee.
Harrison township,	Avenue,	Allegheny Co., ..	Thomas McMaster.
Hilltown township,	Hilltown,	Montgomery,	
	Co.,		J. L. Rosenberger.
Houston township,	Houston,	Washington Co.,	Jas. S. Ferris.
Huston township,	Clover Creek,	Blair Co., ..	David M. Fouse.
Independent township, ..	Geagleyville,	Lebanon Co.,	Jos. Faust.
Jenks township,	Marionville,	Forest Co., ..	Care Dr. J. W. Morrow.
Lancaster township,	48 N. Duke St.,	Lancaster,	
	Lancaster Co.,		C. Herbert Obreiter.
Liberty township,	Saxton,	Bedford Co.,	G. H. Dilling.
Limerick township,	Wurtenburg,	Montgomery	
	Co.,		
Lincoln,	Lincoln,	Allegheny Co., ..	
Lower St. Clair township, ..	Lyman,	Allegheny Co., ..	J. H. Stein.
Lower Makefield twp., ..	Morrisville,	Bucks Co., ..	
Lower Merion,	Gladwyne,	P. O. Box 12,	
	Montgomery Co.,		J. W. Winter, M. D.
Lower Providence,	Fairview Village,	Mont-	
	gomery Co.,		Daniel M. Anders.
Mahoning township,	Lawrence Co.,		
Marionville township,	Marionville,	Forest Co., ..	T. J. Reyner.
Marlboro township,	Sumneytown,	Montgom-	
	ery Co.,		Dr. H. A. S. Moyer.
Mauch Chunk,	Lansford,	Carbon Co., ..	R. Davis, M. D., Pres.
Mifflin township,	Dravosburg,	Allegheny	
	Co.,		J. M. Reed, Supt. Schools.
			Dan. H. Herwig, Sec'y.
Montgomery township, ...	Montgomery,	Montgomery	
	Co.,		W. H. Danehauer.
Moreland township,	Terwood,	Montgomery	
	Co.,		J. H. Eisenbrey.
Morris township,	Morrisdale Mines,	Clear-	
	field Co.,		J. E. Hedding, Pres.
Mount Carmel township, ..	Locust Gap,	Northumber-	
	land Co.,		H. J. Maler.
Nesquehoning township, ..	Nesquehoning,	Carbon	
	Co.,		John M. Bond, Jr.
Neville township,	Coraopolis,	Allegheny Co.,	C. N. Moore, Sec'y.
			W. H. Amend, Agent.
New Britain township, ..	Chalfont,	Bucks Co.,	A. H. Faust.
Nickelville township,	Nickelville,	Venango Co.,	J. H. Donaldson
Norristown township,	Norristown,	Montgomery	
	Co.,		Care Dr. H. H. Whitcomb.

School District.	Postoffice.	County.	Secretary or Agent.
North Cornwall township,	Lebanon,	Lebanon Co.,	..G. E. Arnto.
North Versailles,	Turtle Creek,	Allegheny Co.,	.....John F. Stewart.
Packer township,	Packerton,	Carbon Co.,	..Care Dr. J. B. Tweedle.
Perry township,	Perry,	Lawrence Co.,	....J. M. Burnhart.
Pine township,	Mahoning,	Armstrong Co.,	C. H. Turner.
Porter township,	Muir,	Schuylkill Co.,	....C. G. Riegel.
Pulaski township,	Nashua,	Lawrence Co.,	..
Radnor township,	Wayne,	Delaware Co.,	..Dr. J. C. Egbert.
Ringgold township,	Ringgold,	Jefferson Co.,	..R. T. Gahogan.
Robeson township,	Midway,	Washington Co.,	I. M. Moon.
Rose township,	Stanton,	Jefferson Co.,	...W. Brakey.
Salem township,	Hallisterville,	Wayne Co.,	J. E. Elliott.
Hallsburg township,	Allentown,	Lehigh Co.,	..Dr. M. F. Cawley.
Hallsbury township,	Gap,	Lancaster Co.,	.....D. P. Stamix.
Scott township,	Joint,	Allegheny Co.,	....D. L. Davis.
Sharon township,	Shinglehouse,	Potter Co.,	F. N. Newton.
Shirley township,	Shirleysburg,	Huntingdon Co.,	.....Dr. H. R. Douglas.
Smithfield township,	Huntingdon Co.,	.....
Snow Shoe,	Snow Shoe,	Centre Co.,	..R. B. Gilliland.
Snyder township,	Tyrone,	Blair Co.,	.....A. Frantz, Pres.
South Buffalo township,	Freeport,	Armstrong Co.,	
Spring township,	Axemann,	Centre Co.,	....R. M. Kemp.
Spring township,	Sinking Springs,	Berks Co.,	.....J. R. Miller.
Springdale township,	Cheswick,	Allegheny Co.,	J. C. Bunting.
Springfield township,	Chestnut Hill,	Montgomery Co.,	.....Dr. R. H. Bolling.
Spring Garden,	Mutzig,	Allegheny Co.,	..George Thurn.
Spruce Creek,	Spruce Creek,	Huntingdon Co.,	.....W. D. Graffina.
Stowe township,	McKees Rocks,	Allegheny Co.,	.....W. Minnick.
Summit township,	Erie,	Erie Co.,	.....H. B. Hershey.
Susquehanna township,	Mahantague,	Juniata Co.,	M. S. Brubaker.
Transfer township,	Mercer Co.,	.....
Tilden township,	Berks,	Berks Co.,	.....J. H. Epler.
Towamensing,	Kulpville,	Montgomery Co.,	.....I. G. Metz.
Tredyffrin township,	Wayne,	Delaware Co.,	....J. H. Dingey.
Tremont township,	Tremont,	Schuylkill Co.,	G. C. Fegley,
Union township,	Banksville,	Allegheny Co.,	Thomas Wyse, Secretary.
Union township,	Rockton,	Clearfield Co.,	..C. Caldwell.
Upper Darby township,	Leanerch,	Delaware Co.,	J. M. Lutz.
Upper Dublin,	Jarretstown,	Montgomery Co.,	.....Thomas H. Leal,

School District.	Postoffice.	County.	Secretary or Agent.
Upper Gwyned township,	West Point,	Montgomery	
	Co.,	.....	J. F. Fenstermacher.
Upper St. Clair township,	Pittsburgh,	Allegheny Co.,	U. S. Donaldson.
Upper Providence twp.,			
	Delaware Co.,	.....	Yerkes, Montgomery Co., C. D. Hunsecker.
Upper Salford township,	Rudy,	Montgomery Co.,	M. H. Walters.
Valley township,	.....	Coatesville, Chester Co.,	H. E. Stone.
Vanport,	.....	Vanport, Beaver Co.,	A. G. Russel.
Wayne,	.....	Duck Run, Lawrence Co.,	J. A. Gardner.
Warrior's Mark,	.....	Warrior's Mark, Hunting-	
		don Co.,	.....
			Wm. Burket.
Washington township,	...	Belle Vernon, Fayette Co.,	J. W. Fisher.
Washington township,	..	Rockdale Mills, Jefferson	
		Co.,	.....
			W. C. Smith.
Washington township,	..	Bally, Montgomery Co.,	..H. S. Mack.
Washington township,	..	Hall, York Co.,	.....
			A. G. Slater.
West Brunswick,	.....	Port Clinton, Schuylkill	
		Co.,	.....
			H. Robinhold.
West Hempfield township,	Silver Springs,	Lancaster	
		Co.,	.....
			A. L. Hershey.
Westtown,	.....	Oakbourne, Chester Co.,	..J. G. Williams.
Well's Valley,	.....	Wells Tannery, Fulton	
		Co.,	.....
			W. H. Bumgardner.
Winslow,	.....	Sykesville, Jefferson Co.,	W. A. Louden.
Wysox,	.....	Towanda, Bradford Co.,	S. A. Allen.

LIST OF BOARDS OF TOWNSHIP COMMISSIONERS OF TOWNSHIPS OF THE FIRST CLASS ACTING AS BOARDS OF HEALTH.

Under the Act of April 28, A. D. 1899.

Township.	County.	Commissioner.
Cheltenham,	Montgomery,	George Branin.
Coal,	Northumberland,	Jacob Fleming.
Crescent,	Allegheny,	H. G. Miller.
Harrison,	Allegheny,	H. M. Breckenridge.
Lower Merion,	Montgomery,	Wm. E. Barrett.
Lower St. Clair,	Allegheny,	M. Meters.
Marcy,	Luzerne,	Anthony Hennigan.
Mifflin,	Allegheny,	James Henderson.
Newport,	Luzerne,	T. S. Perkins.
Plains,	Luzerne,	Edward J. Quinn.
Plymouth,	Luzerne,	Wm. Weston.
Reserve,	Allegheny,	J. Mott.
Shaler,	Allegheny,	Henry Zugenheim.
Union,	Allegheny,	Morgan Evans.
Whitehall,	Lehigh,	Tilghman Weaver.
Wilkes-Barre,	Luzerne,	Thomas Rooney.

APPENDIX I.

CORRESPONDENCE AND LEGAL OPINIONS.

Correspondence:

Circular Letter Addressed to School Boards.

Legal Opinions:

1. Opinion of the City Solicitor as to the right of the Board of Education to exclude any pupil from the schools who refuses to submit to an examination to determine whether the law regarding successful vaccination has been complied with.
2. Suit against School Directors of German Township.

CORRESPONDENCE.

CIRCULAR LETTER ADDRESSED TO SCHOOL BOARDS.

Commonwealth of Pennsylvania,
State Board of Health,
Executive Office, 1420 Chestnut Street, Philadelphia.

Dear Sir: With reference to the assumption by school boards of the "power and authority" conferred upon them by the act of April 11, 1899, "to make and enforce all needful rules and regulations to prevent the introduction and spread of contagious and infectious diseases" and also to abate "nuisances detrimental to the public health," I beg leave to make the following suggestions:

The first step should be, for the board, either at a regular meeting or at a special meeting, legally called for the purpose, to adopt a formal resolution assuming the duties and responsibilities thus assigned to it, quoting in the resolution the entire act, with title and date of approval.

The second step will be to adopt regulations. The circulars which I send you will furnish all the material you need from which to formulate your rules and regulations. The act contained in Circular No. 46, can be adopted as it stands, with very little alteration. The only restriction on your authority to draft regulations is, that they must be in conformity with the rules and regulations of the State Board of Health. You should then provide yourself with the necessary blanks and forms for carrying out your regulations. These should include a form of complaint of nuisances, an order for the abatement of nuisances, a report of contagious diseases for physicians, a vaccination certificate, and placards for the different contagious diseases, of all of which I enclose models. These forms can be obtained from the firm whose price-list I enclose.

The State Board of Health will furnish you as many copies as you may need at any time of any of the precautionary circulars which I enclose. These circulars are of great use for the information of the public, more particularly during the presence of contagious and infectious diseases. I also suggest that it would be well to have them read from time to time in the schools, for the instruction and information of both the teachers and of the scholars. In this way the rising generation will obtain such an amount of useful information on

these subjects as will result in a marked diminution of the prevalence of such diseases, when they shall have themselves become the heads of families.

Your board should provide itself with books for recording contagious diseases, nuisances, expenses incurred for sanitary purposes, etc.

While it is not compulsory upon the board to appoint an agent if it considers that the duties thus assigned it can be properly performed by its members without such an officer, owing to the unusual prevalence of contagious disease at the present time, it is a matter of much importance that this step should be promptly taken.

In return for such advice and assistance as the State Board of Health may render your board in the prosecution of its sanitary duties, it will expect to receive reports of all cases of contagious and infectious disease of which your board may receive information.

Yours very respectfully,

BENJ'N LEE, M. D.,

Secretary of State Board of Health.

LEGAL OPINIONS.

Opinion of the City Solicitor as to the Right of the Board of Education to Exclude any Pupil from the Schools who Refuses to Submit to an Examination to Determine Whether the Law Regarding Successful Vaccination has been Complied With.

Some time ago the Committee on Hygiene of the board of education, at the suggestion of Director Martin, of the Department of Public Health and Charities, authorized the vaccine physicians of the Bureau of Health to visit the public schools for the purpose of examining the arms of the pupils, in order to determine whether the vaccination had been successful or otherwise. A short time thereafter Principal Edwin Y. Montayne, of the Keystone Grammar school, Nineteenth and Chestnut streets, reported that Esther Field, a pupil in that school, was not examined, for the reason that her father, C. J. Field, had refused to permit such an examination to be made. In his letter to Principal Montayne, Mr. Field said: "In the matter of the re-examination of my children for any re-vaccination, I must certainly decline any such move. Will you kindly see that no one interferes with them in any way? I have no wish to go to law, but I most certainly shall, if my wishes are not respected."

When the matter was brought to the attention of the Hygiene Committee that body decided to obtain an opinion from the city solicitor as to the right of the board to exclude any pupil from the schools who refuses to submit to an examination to determine whether the law in regard to successful vaccination has been complied with. This opinion, which sets forth that the board of education possesses such a right, was received from City Solicitor Kinsey and considered at a meeting of the Hygiene Committee. The opinion is in these words:

"To the inquiry of the Board of Public Education, transmitted by you, as to the right of that board to exclude by general resolution any pupil from the public school who refuses to submit to an examination for the purpose of determining whether the law in regard to successful vaccination has been complied with, I reply that in the cases of *Duffield vs. School District* (162, Pa. 476) and *Field vs. Robinson* (198, Pa. 638), it was decided by the Supreme Court that schools directors or controllers may in the exercise of a sound discretion exclude from the public schools pupils who have not been vaccinated, and that whether a resolution excluding such pupils is a reasonable one is to be judged, in the first instance, by the school directors or controllers.

"By act of June 18, 1895, section 12, P. L. 203, all principals or other persons in charge of schools are required to refuse admission to any child, except upon a certificate signed by a physician, setting forth that such child has been successfully vaccinated, or has previously had small-pox. The provisions of this act require the refusal of admission to pupils not furnishing the necessary physician's certificate, but in the opinion of this department, that act does not preclude the school authorities from requiring further tests to ascertain whether a pupil has undergone a successful vaccination, if the conditions are such, or the emergency from the prevalence of small-pox is so imminent, that, in their judgment, such further tests are necessary to safeguard the health of the other pupils attending the public schools or of the community at large.

"If, therefore, the Board of Public Education in the present instance believes the emergency to be one which requires the physical examination of pupils, in order to ascertain whether they have been successfully vaccinated, I am of the opinion that it has the power to make and enforce a regulation to that effect."

Suit Against School Directors of German Township.

Among the records and proceedings enrolled in the court of common pleas in and for the County of Fayette, in the Commonwealth of Pennsylvania, to No. 355 June term, 1903, is contained the following:

Copy of Continuance Docket Entry.

Dr. T. H. White, Health and Quar-
antine Officer for Fayette Co., Pa.,

vs.

S. B. Rotharmel, L. D. Woodfill, Gil-
bert D. Coffman, George W. Stru-
ble, James H. Hoover and J. Cal-
vin Lawrence, School Directors of
the School District of German
Township.

} Petition for Mandamus.

Now May 20, 1903, petition is presented at Chambers and upon consideration thereof a writ of mandamus is ordered as prayed for directed to Gilbert D. Coffman, President, and L. D. Woodfill, Secretary, and both being directors of the board of directors of the school district of German township within mentioned, as well as to S. B. Rotharmel, George W. Struble, James H. Hoover and J. Calvin Lawrence, the other members of said board of directors, commanding them to appear in said court on Friday, May 22, 1903, and confess or deny the matters set forth in said petition and observe what order the court shall make in the premises. E. H. Reppert, P. J. Same day writ and mandamus issued returnable Friday, May 22, 1903.

May 22, 1903, answer filed, service of writ accepted. And now May 22, 1903, the petition and answer in this matter being heard, with arguments of the counsel, and it being admitted that a contagious disease, viz: Small-pox, is now prevalent in German township and the said school board of said township having indicated their willingness to appoint Thomas G. Christopher as health officer or sanitary agent representing them to serve until September 1, 1903, at a compensation of two dollars per day for each day he is actually engaged in performing the duties of said appointment, the court direct and approve the appointment of said Thomas G. Christopher as such sanitary agent and approve the rate of compensation proposed to be paid him and direct that said agent shall enforce all needful rules and regulations the school board may make to prevent the introduction and spread of infectious diseases by the regulation of in-

tercourse with infected places and shall have power to enter at any time in and upon any premises in the said township in which there is suspected to be any contagious disease or nuisance productive of such disease or detrimental to the public health for the purpose of examining the said premises and abating any nuisance found therein detrimental to the public health. And the court further order and direct that said school board pay the compensation of the said sanitary agent at the rate above approved and all such assistants as the board may necessarily employ in order to render said agent's services effective out of the school funds of said district.

Per Curiam.

Dr. T. H. White, Health and Quarantine Officer for Fayette Co., Pa.

vs.

S. B. Rotharmel, L. D. Woodfill, Gilbert D. Coffman, George W. Struble, James H. Hoover and J. Calvin Lawrence, School Directors of the School District of German Township.

In the Court of Common Pleas of Fayette County.

No. — June Term, 1903.

Petition for Mandamus.

To the Honorable the Judges of said Court:

The petition of T. H. White, M. D., of said county, respectfully represents:

1. That he is the duly appointed and commissioned health and quarantine officer for Fayette county, under the State Board of Health.

2. That the said S. B. Rotharmel, L. D. Woodfill, Gilbert D. Coffman, George W. Struble, James H. Hoover and J. Calvin Lawrence constitute at present the board of school directors of the school district of German township in said county.

3. That numerous persons in said German township, particularly at and about what is known as Edenborn Coke Works have been and now are afflicted with the contagious disease known as small-pox, also with variolo or varioloid, and there is great danger that said diseases will spread over a greater area if measures are not at once taken to prevent the same.

4. That it is the duty of said school directors by themselves or by a sanitary agent by them appointed, to enter upon the premises in said township in which there is suspected or known to be such contagious disease and thereupon to examine said premises and if

said disease is found to exist, then to formulate and enforce all needful rules and regulations to prevent the further spread of said diseases, and to prevent and regulate intercourse with said infected places and persons, and to fully abate said diseases thus detrimental to the public health; said school directors being also required under the approval of this court to set forth the compensation which said directors deem proper to pay for the services required in the premises, and to pay the same out of the school funds of the township after this court has authorized the appointment of a sanitary agent in case such agent is appointed; as is provided in the act of Assembly of April 11, 1899, P. L. 38.

5. That said school directors have been warned of the existence of said contagious diseases within said township at the places aforesaid and have been requested to perform their duties as prescribed by law, but have failed and neglected so to do, so that the public health in that locality is seriously threatened and nuisance exists which is detrimental to the public health.

Wherefore your petitioner prays that a writ of mandamus may issue to said school directors commanding them forthwith to perform their duties in the premises according to said act of Assembly as hereinbefore specifically set out in paragraph 4. And being duly sworn says that the foregoing statements are correct and true as he is informed and verily believes.

Sworn to and subscribed this May 20, 1903, before me,

T. H. WHITE.
LOGAN RUSH,
Recorder.

Order.

Now May 20, 1903, the foregoing petition is presented at Chambers and upon consideration thereof a writ of mandamus is allowed as prayed for, directed to Gilbert D. Coffman, President, and L. D. Woodfill, Secretary, and both being directors of the board of directors of the school district of German township, within mentioned, as well as to S. B. Rotharmel, George W. Struble, James H. Hoover and J. Calvin Lawrence the other members of said board of directors, commanding them to appear in said court on Friday, May 22, 1903, and confess or deny the matters set forth in said petition, and observe what order the court shall make in said premises.

E. H. REPERT, P. J.

Notice of presenting petition to Judge at Chambers accepted for defendants, May 20, 1903.

ROBINSON & McKEAN,
Attorneys for the School Board of German township, Fayette Co., Pa.

The Commonwealth of Pennsylvania.

Fayette County.

} ss.

To Gilbert D. Coffman, President, and L. D. Woodfill, Secretary, S. B. Rotharmel, George W. Struble, James H. Hoover and L. Calvin Lawrence, School Directors of German Township. Greeting:

Whereas, Dr. T. H. White, Health and Quarantine Officer for Fayette county, Pa., has filed his petition setting forth that he is the duly appointed and commissioned health and quarantine officer for Fayette county under the State Board of Health, that the said S. B. Rotharmel, L. D. Woodfill, Gilbert D. Coffman, George W. Struble, James H. Hoover and J. Calvin Lawrence constitute at present the board of school directors of the school district of German township in said county.

That numerous persons in said German township, particularly at and about what is known as Ebenborn Coke Works have been and now are affected with the contagious disease known as small-pox, also with variolo or varioloid, and there is great danger that said diseases will spread over a greater area if measures are not at once taken to prevent the same. That it is the duty of said school directors by themselves or by a sanitary agent by them appointed, to enter upon the premises in said township in which there is suspected or known to be such contagious disease and thereupon the examine said premises and if said disease is found to exist, then to formulate and enforce all needful rules and regulations to prevent the further spread of said disease, and to prevent and regulate intercourse with said infected places and persons and to fully abate said diseases thus detrimental to the public health, said school directors being also required under the approval of this court to set forth the compensation which said directors deem proper to pay for the services required in the premises, and to pay the same out of the school funds of the township, after this court has authorized the appointment of a sanitary agent in case such agent is appointed, as is provided in the act of Assembly of April 11, 1899, P. L. 38.

That said school directors have been warned of the existence of said contagious diseases within said township at the places aforesaid and have been requested to perform their duties as prescribed by law, but have failed and neglected so to do, so that the public health in that locality is seriously threatened and nuisance exists which is detrimental to the public health.

And whereas, in pursuance of the prayer of said petition the Hon. E. H. Reppert, President Judge of our said county did order that a writ of mandamus be issued to Gilbert D. Coffman, President, and L. D. Woodfill, Secretary, S. B. Rotharmel, George W. Struble, James H. Hoover and J. Calvin Lawrence, members of the board of school directors of German township, returnable Friday May 22, 1903.

We therefore command you, Gilbert D. Coffman, President, L. D. Woodfill, Secretary, S. B. Rotharmel, George W. Struble, James H. Hoover and J. Calvin Lawrence, school directors of German township to be and appear in said court on Friday May 22, 1903, and confess or deny the matters set forth in said petition, herein fail not under the penalty which may ensue.

Witness the Hon. E. H. Reppert, President of our said Court at Uniontown, Pa., this 20th day of May, 1903.

PETER E. SHEPPARD,
Prothonotary.

Dr. T. H. White, Health and Quarantine Officer for Fayette Co., Pa.,
vs.
S. B. Rotharmel, et al., School Directors of the School District of German Township.

In the Court of Common Pleas
of Fayette County.

No. 355 June Term, 1903.

Answer of Respondents.

To the Honorable the Judges of said Court:

S. B. Rotharmel, L. D. Woodfill, Gilbert D. Coffman, George W. Struble, James H. Hoover and J. Calvin Lawrence, school directors of the school district of German township, in said county, to the writ of mandamus in this case directed to them make answer as follows:

Respondents admit that the petitioner, T. H. White, M. D., is the health and quarantine officer for Fayette county under the State Board of Health, and that respondents are the board of school directors of the school district of German township, in said county.

Respondents also admit that certain persons in said township, particularly at and about Ebenborn Coke Works, are afflicted with the contagious disease known as small-pox, also with variola or varioloid, and that the same may spread over a greater area, and that respondents have been warned of the prevalence of said disease as set forth in the paragraphs third and forth of the petition filed in this case.

Respondents neither admit nor deny that it is their duty, by themselves, or by a sanitary agent by them appointed, to enter upon the premises in said township in which there is suspected or known to be such contagious disease, and thereupon to examine said premises, and if said disease is found to exist, then to formulate and enforce all needful rules and regulations to prevent the further spread of said diseases, and to prevent and regulate intercourse with said infected

places and persons, and to fully abate said diseases thus detrimental to the public health, or that it is the duty of the respondents, under the approval of this court, to set forth the compensation which they deem proper to pay for the services required in the premises, and to pay the same out of the school funds of the township after this court has authorized the appointment of a sanitary agent, in case said agent is appointed, as is provided in the act of Assembly of April 11, 1899, P. L. 38.

And for further answer respondents say that they have been advised and believe that the act of Assembly under which it is sought to compel them to perform said alleged duties is uncertain and indefinite in defining the same, and provides no fund out of which respondents may legally pay the expenses that would necessarily be incurred in performing said alleged duties, and is uncertain and indefinite in defining the extent and amount to which the public monies in their hands may be used and expended for said purpose, if the same may be expended at all, and that great diversity of opinion exists among themselves and the citizens and tax payers of said township as to the duty and extent thereof, of respondents in the premises, and for them to comply with the demands of said petition would require them to expend a large amount of the school funds in their hands, thereby rendering them liable to surcharge, if the same be found to be improperly and illegally paid out.

Respondents also answer and say, that they have been advised and believe, if said act of Assembly imposes any duty upon them, it extends only to and covers the time when the public schools of said township are in session, and that said schools are now all closed and will not re-open until some time in the month of September next.

Wherefore, Respondents being willing at all times to perform their duties in the premises, if the court be of the opinion that they are as in said petition set forth, respectfully ask that said duties be fully and specifically set forth and defined in the order or decree to them directed.

German Township School Board by Gilbert D. Coffman, President.
Fayette County.

Fayette County, ss:

Samuel B. Rotharmel, a member of said board of school directors, being duly sworn, says that the statements of fact set forth in the foregoing answer are true and correct as he verily believes.

Sworn and subscribed before me this 22d day of May, 1903.

SAMUEL B. ROTHARMEI.

P. E. SHEPPARD,

Prothonotary.

Dr. T. H. White, Health Officer, vs. S. B. Rotharmel et al., School Directors of German Township.	}	In the Court of Common Pleas of Fayette County, Pa. No. 355 June Term, 1903.
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And now, May 22, 1903, the petition and answer in this matter being heard, with arguments of counsel, and it being admitted that a contagious disease, viz: small-pox, is now prevalent in German township, and the said school board of said township having indicated their willingness to appoint Thomas G. Christopher as health officer or sanitary agent, representing them, to serve until September 1, 1903, at a compensation of two dollars per day for each day he is actually engaged in performing the duties of said appointment, the court direct and approve the appointment of said Thomas G. Christopher as such sanitary agent and approve the rate of compensation proposed to be paid him, and direct that said agent shall enforce all needful rules and regulations the school board may make to prevent the introduction and spread of infectious or contagious diseases by the regulation of intercourse with infected places, and shall have power to enter at any time in and upon any premises in the said township in which there is suspected to be any contagious and infectious disease, or nuisance productive of such disease or detrimental to the public health, for the purpose of examining the said premises and abating any nuisance found thereon detrimental to the public health. And the court further order and direct that said school board pay the compensation of said sanitary agent, at the rate above approved, and of such assistants as the board may necessarily employ in order to render said agent's services effective, out of the school funds of said district.

Per Curiam.

Attest:

PETER E. SHEPPARD,
Prothonotary.

Commonwealth of Pennsylvania, }
County of Fayette. } ss.:

I, Peter E. Sheppard, Prothonotary of the court of common pleas in and for said county, do hereby certify that the foregoing is a full, true and correct copy of the whole record of the case therein stated, wherein Dr. T. H. White, health and quarantine officer for Fayette county, Penna., is plaintiff, and S. B. Rotharmel, L. D. Woodfill, Gilbert D. Coffman, George W. Struble, James H. Hoover and J. Calvin Lawrence, school directors of the school district of German town-

ship, are defendants, so full and entire as the same remains of record before the said court at No. 355 of June term, A. D. 1903.

In testimony whereof, I have hereunto set my hand and affixed the seal of said court this 3d day of June, A. D. 1903.

PETER E. SHEPPARD,
Prothonotary.

I, E. H. Reppert, President Judge of the Fourteenth Judicial District, composed of the County of Fayette, do certify that Peter E. Sheppard, by whom the annexed record, certificate and attestation were made and given, and who, in his own proper handwriting, thereunto subscribed his name and affixed the seal of the court of common pleas of said county, was at the time of so doing and now is prothonotary in and for said county of Fayette, in the Commonwealth of Pennsylvania, duly commissioned and qualified, to all of whose acts as such full faith and credit are and ought to be given as well in courts of judicature as elsewhere, and that the said record, certificate and attestation are in due form of law, and made by the proper officer.

EDWARD H. REPERT,
President Judge.

Commonwealth of Pennsylvania, }
County of Fayette. } ss.:

I, Peter E. Sheppard, Prothonotary of the court of common pleas in and for the said county, do certify that the Honorable E. H. Reppert, by whom the foregoing attestation was made, and who thereunto subscribed his name, was at the time of making thereof and still is President Judge of the court of common pleas, orphans' court and court of quarter sessions of the peace in and for said county, duly commissioned and qualified, to all whose acts as such full faith and credit are and ought to be given as well in courts of judicature as elsewhere.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said court this day of June, A. D. 1903.

Prothonotary.

APPENDIX K.

ORGANIZATION, BY-LAWS AND REGULATIONS OF THE STATE BOARD OF HEALTH AND VITAL STATISTICS.

Officers and Members.

President, Hon. Samuel T. Davis, M. D., Lancaster.

Secretary, Benjamin Lee, M. D., Philadelphia.

Members, John Fulton, C. E., Johnstown; J. H. McClelland, M. D., Pittsburg; Hon. Samuel T. Davis, M. D., Lancaster; Geo. G. Groff, M. D., Lewisburg; Charles H. Harvey, M. D., Philadelphia; Milton A. Embick, Boiling Springs; Benjamin Lee, M. D., 1420 Chestnut street, Philadelphia.

Place of meeting, State Capitol, Harrisburg (unless otherwise ordered). Janitor—John Harner, 1417 North Third street, Harrisburg.

Time of meeting—Second Thursday in May, July and November, at 4 P. M.

Standing Committees.

I. Executive Committee—Charles H. Harvey, M. D., chairman; Milton A. Embick and Benjamin Lee, M. D., Secretary. Place of meeting, executive office, 1420 Chestnut street, Philadelphia.

II. Committee on Registration and Vital Statistics—Dr. Benjamin Lee and Dr. Samuel T. Davis. Bureau of Registration of Vital Statistics, State Superintendent of Registration of Vital Statistics, Benjamin Lee, M. D. Registrars of Marriages, Births and Deaths, all clerks of Orphans' Courts. Registrars of Practitioners of Medicine and Surgery, all Prothonotaries.

III. Committee on Preventable Diseases, Disinfection and Supervision of Travel and Traffic—Geo. G. Groff, M. D., chairman, and Samuel T. Davis, M. D.

IV. Committee on Water Supply, Drainage, Sewerage, Topography and Mines—John Fulton, C. E., chairman, and J. H. McClelland, M. D.

V. Committee on Public Institutions and School Hygiene—S. T. Davis, M. D., chairman, and Charles H. Harvey, M. D.

VI. Committee on Adulterations, Poisons, Explosives, and other Special Sources of Danger to Life and Limb—Milton A. Embick, chairman, and John Fulton, C. E.

VII. Committee on Sanitary Legislation, Rules and Regulations—James H. McClelland, M. D., chairman, and Benjamin Lee, M. D.

The President is a member ex-officio of all committees.

County Medical Inspectors.

G. Rice, M. D., McSherrystown, Adams county.

S. M. Rinehart, M. D., Allegheny, Allegheny county.

T. N. McKee, M. D., Kittanning, Armstrong county.

H. S. McConnell, M. D., New Brighton, Beaver county.

M. de La M. Hill, M. D., Osterburg, Bedford county.

Wm. M. Findley, M. D., Altoona, Blair county.

S. M. Woodburn, M. D., Towanda, Bradford county.

Israel Cleaver, M. D., Reading, Berks county.

James E. Groff, M. D., Doylestown, Bucks county.

John E. Byers, M. D., Butler, Butler county.

Wm. E. Matthews, M. D., Johnstown, Cambria county.

E. O. Bardwell, M. D., Emporium, Cameron county.

J. B. Tweedle, M. D., Weatherly, Carbon county.

George F. Harris, M. D., Bellefonte, Centre county.

J. C. Mewhinney, M. D., Spring City, Chester county.

H. N. Hess, M. D., Fryburg, Clarion county.

Spencer M. Free, M. D., DuBois, Clearfield county.

R. B. Watson, M. D., Lock Haven, Clinton county.

S. B. Arment, M. D., Bloomsburg, Columbia county.

E. T. Lashells, M. D., Meadville, Crawford county.

Harvey B. Bashore, M. D., West Fairview, Cumberland county.

Paul A. Hartman, M. D., Harrisburg, Dauphin county.

Robert S. Maison, M. D., Chester, Delaware county.

W. L. Williams, M. D., Ridgway, Elk county.

C. B. Kibler, M. D., Corry, Erie county.

J. W. Wright, M. D. (assistant), Erie, Erie county.

T. H. White, M. D., Connellsville, Fayette county.

J. W. Morrow, M. D., Tionesta, Forest county.

H. X. Bonbrake, M. D., Chambersburg, Franklin county.

John T. Iams, M. D., Waynesburg, Greene county.

A. B. Brumbaugh, M. D., Huntingdon, Huntingdon county.

N. F. Ehrenfeld, M. D., Indiana, Indiana county.

A. F. Balmer, M. D., Brookville, Jefferson county.

Wm. H. Banks, M. D., Mifflintown, Juniata county.

H. V. Logan, M. D., Scranton, Lackawanna county.
M. W. Raub, M. D., Lancaster, Lancaster county.
J. D. Moore, M. D., New Castle, Lawrence county.
Morris F. Cawley, M. D., Allentown, Lehigh county.
S. P. Heilman, M. D., Heilmandale, Lebanon county.
Chas. P. Knapp, M. D., Wyoming, Luzerne county.
A. Richter, M. D., Williamsport, Lycoming county.
Burg Chadwick, M. D., Smethport, McKean county.
T. M. Cooley, M. D., Sandy Lake, Mercer county.
A. T. Hamilton, M. D., Lewistown, Mifflin county.
W. E. Gregory, M. D., Stroudsburg, Monroe county.
H. H. Whitcomb, M. D., Norristown, Montgomery county.
Edward A. Curry, M. D., Danville, Montour county.
Thomas C. Zulick, M. D., Easton, Northampton county.
A. C. Clark, M. D., Sunbury, Northumberland county.
A. R. Johnston, M. D., New Bloomfield, Perry county.
Wm. B. Atkinson, M. D., Philadelphia, Philadelphia county.
Wm. B. Kenworthy, M. D., Milford, Pike county.
E. H. Ashcraft, M. D., Coudersport, Potter county.
A. H. Halberstadt, M. D., Pottsville, Schuylkill county.
F. J. Wagenseller, M. D., Selinsgrove, Snyder county.
Henry Garey, M. D., Berlin, Somerset county.
Theodore Wright, M. D., Dushore, Sullivan county.
H. B. Lathrop, M. D., Springville, Susquehanna county.
C. S. Logan, M. D., Arnot, Tioga county.
Wm. Leiser, Jr., M. D., Lewisburg, Union county.
J. P. Strayer, M. D., Oil City, Venango county.
W. M. Robertson, M. D., Warren, Warren county.
C. B. Wood, M. D., Monongahela, Washington county.
H. A. Plum, M. D., Hawley, Wayne county.
Robert B. Hammer, M. D., Greensburg, Westmoreland county.
B. E. Bidleman, M. D., Tunkhannock, Wyoming county.
I. C. Gable, M. D., York, York county.

Engineer Inspectors.

Eastern District—William H. Boardman, C. E., Philadelphia.
Western District—Northern Division, James H. Harlow, C. E., Edgewood.
Western District—Southern Division, Thomas P. Roberts, C. E., Pittsburg.

Bacteriologist.

Professor W. M. L. Coplin, M. D., Jefferson Medical College, Philadelphia.

Assistant Bacteriologists.

Eastern District—Robert L. Pitfield, M. D., Philadelphia.

Western District—E. G. Matson, M. D., Pittsburg.

Monroe County—Richard Slee, M. D., Swiftwater.

Union County—Prof. Nelson F. Davis, Lewisburg.

Chemists.

Eastern District—Laboratory of Hygiene, University of Pennsylvania, Philadelphia.

Western District—Professor F. C. Phillips, Western University of Pennsylvania, Allegheny.

Constitution.

The constitution of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania is the act of Legislature establishing the Board, approved June 3, 1885, of which the following is the correct text:

AN ACT

To establish a State Board of Health for the better protection of life and health, and to prevent the spread of contagious and infectious diseases in this Commonwealth.

Manner of appointment.

Number of members.

Term of service.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That the Governor by and with the advice and consent of the Senate, shall appoint six persons, a majority of whom shall be physicians of good standing, graduates of regularly chartered and legally constituted medical colleges, and of not less than ten years' experience in the practice of their profession, and one of whom shall be a civil engineer, who, together with the secretary, the mode of whose appointment is hereinafter provided for, shall constitute and be designated as the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Of the six persons first appointed two shall serve for two years, two for four years and two for six years, from the first day of July next following their confirmation; and the Governor shall thereafter biennially appoint, by and with the ad-

vice and consent of the Senate, two persons of the same professions as those whose terms of office have just expired, to be members of said Board, to hold their offices for six years from the first day of July next following their confirmation, and until their successors are appointed, excepting the secretary, who shall continue in office as hereinafter provided; but any member may be reappointed. Any vacancy occurring in said board during a recess of the Legislature shall be filled by the Governor until the next regular session of the same.

Section 2. As soon as possible after the appointment of the first six persons as aforesaid, they shall meet in the office of the Secretary of the Commonwealth, and shall proceed, under the direction of the latter office, to determine, by lot, which of them shall serve for the respective terms of two, four and six years. Before entering upon the duties of the office they shall take the oath prescribed for State officers by the Constitution of the State, and shall file the same in the office of the Secretary of the Commonwealth, who, upon receiving the said oath of office, shall issue to each a certificate of appointment for his respective term of office determined as aforesaid; upon receiving which they shall possess and exercise the powers and perform the duties of said Board as defined in this act. Immediately after having taken the oath of office they shall organize by electing one of their number to be president, and by appointing a proper person, who shall be a physician of good standing, of not less than ten years' professional experience, and a graduate of a legally constituted medical college, to be secretary of said Board, who shall hold his appointment until removed by the appointment of his successor or otherwise. The Board may elect one of its own members secretary, in which case the vacancy thus created shall be filled by the Governor in the same manner as a vacancy caused in any other way. The president shall be elected annually. No member of the Board, except the secretary, shall, as such, receive any salary; but the actual traveling and other expenses of any member while engaged on the actual duties of the Board, shall be allowed and paid on presentation to, and approval by the Auditor General of an itemized account, with vouchers annexed.

Manner of organization.

Appointment of secretary.

Actual expenses of members to be paid.

Duties of Secretary.

Section 3. The secretary shall be the executive officer of the Board, and shall have all the powers and privileges of a member of said Board, except in regard to voting upon matters relating to his own office and duties as secretary. He shall receive an annual salary of two thousand dollars, which shall be paid him in the same manner that salaries of other State officials are paid; and such necessary expenses as the Auditor General shall audit, on presentation of an itemized account with vouchers annexed and the certificate of the Board, shall be allowed him.

Time and place of meeting.

Section 4. The said Board shall meet at least once every six months, and may also hold special meetings as frequently as the proper and efficient discharge of its duties shall require, in the Capitol building at Harrisburg (unless otherwise ordered), and the rules and by-laws of the Board shall provide for the giving of proper and timely notice of all such meetings to every member of the Board. The Secretary of Internal Affairs shall provide and furnish such apartments and stationery as said Board may require in the discharge of its duties. A majority of the members of the Board shall, at any regular, called or adjourned meeting, organize and constitute a quorum for the transaction of business.

Duties and functions of board defined.

Section 5. The State Board of Health and Vital Statistics shall have the general supervision of the interests of the health and lives of the citizens of the Commonwealth and shall especially study its vital statistics. It shall make sanitary investigations and inquiries respecting the causes of disease, and especially of epidemic diseases, including those of domestic animals, the sources of mortality, and the effects of localities, employments, conditions, habits, food, beverages and medicine on the health of the people. It shall also disseminate information upon these and similar subjects among the people. It shall, when required by the Governor or the Legislature, and at such other times as it deems it important, institute sanitary inspections of public institutions or places throughout the State. It shall codify and suggest amendments to the sanitary laws of the Commonwealth and shall have power to enforce such regulations as will tend to limit the progress of epidemic diseases.

Section 6. In cities, boroughs, districts and places having no local boards of health, or in case the sanitary laws or regulations in places where boards of health or health officers exist should be inoperative, the State Board of Health shall have power and authority to order nuisances, or the cause of any special diseases or mortality to be abated and removed, and to enforce quarantine regulations as said Board shall direct.

Powers of board.

Any person who shall fail to obey, or shall violate, such order shall, on conviction, be sentenced to pay a fine of not more than one hundred dollars at the discretion of the court.

Penalty for violation and neglect.

Section 7. It shall be the duty of the State Board of Health and Vital Statistics to have general supervision of the State system of registration of births, marriages and deaths, of prevalent diseases, and of practitioners of medicine and surgery, to prepare the necessary methods, forms and blanks for obtaining and preserving such records, and to insure the faithful registration of the same in the several counties and in the Central Bureau of Vital Statistics at the Capitol of the State. The said Board shall recommend such forms and amendments of laws as shall be deemed to be necessary for the thorough organization and efficiency of the registration of vital statistics throughout the State. The Secretary of the State Board of Health and Vital Statistics shall be the superintendent of registration of vital statistics as supervised by said Board; the clerical duties and safe keeping of the bureau of vital statistics thus created shall be provided for by the Secretary of Internal Affairs, who shall also provide and furnish such apartments and stationery as said Board shall require in the discharge of such duties.

Functions of board of registration.

Secretary of Internal Affairs to provide stationery and apartments.

Section 8. It shall be the duty of all health officers and boards of health in the State to communicate to said State Board of Health copies of all their reports and publications and also such sanitary information as may be requested by said Board. And said Board is authorized to require reports and information (at such times and of such facts, and, generally, of such nature and extent as its by-laws or rules may provide) from all public dispensaries, hospitals, asylums, infirmaries, prisons and schools, and from the mana-

Local boards of health and institutions to report to board.

gers, principals and officers thereof, and from all other public institutions, their officers and managers, and from the proprietors, managers, lessees and occupants of all places of public resort in the State; but such reports shall only be required concerning matters or particulars in respect of which it may, in its opinion, need information for the proper discharge of its duties.

Scientific investigations.

Section 9. Said Board may, from time to time, engage suitable persons to render sanitary service or to make or supervise practical and scientific investigations and examinations requiring expert skill, and to prepare plans and reports relative thereto. But no more than two thousand dollars shall be expended in any one year for such special sanitary service.

Annual report.

Section 10. It shall be the duty of said Board, on or before the first Monday of December, in each year, to make a report in writing to the Governor of this State upon the sanitary condition and the prospects of the State, and such report shall set forth the action of the said Board and its officers and agents, and the names thereof, for the past year, and may contain other useful information pertinent to the objects for which it was created, and shall suggest any further legislative action or precaution deemed proper for the better protection of life and health; and the annual report of said Board shall also contain a detailed statement of the (State) Treasurer of all moneys paid out by or on account of said Board, and a detailed statement of the manner of its expenditures during the year last past, but its total expenditures shall not exceed the sum of five thousand dollars in any one year.

S. in P. L., probably a mistake of transcriber.

Appropriation.

Section 11. The sum of ten thousand dollars (\$10,000) is hereby appropriated from the Treasury for the purposes of this act and the expenditures properly incurred by the authority of said Board and verified by affidavit, subject, however, to the limitations hereinbefore imposed, and shall be paid by the Treasurer upon the warrant of the Auditor General.

Section 12. This act shall take effect immediately, and all acts or parts of acts inconsistent herewith shall be and are hereby repealed.

Approved June 3, 1885.

ROBERT E. PATTISON.

BY-LAWS.

The by-laws of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania are as follows:

Article I.

Officers of the Board.

Section 1. The officers of the Board shall be a President and Secretary as directed by section two of the act establishing the Board.

Section 2. All elections shall be by ballot.

Article II.

Duties of Officers.

Section 1. The President shall preside at the meetings of the Board, preserve order, and perform such other duties as custom and parliamentary usage require. He shall be, ex-officio, a member of all committees.

Section 2. The Secretary shall keep the records and conduct the correspondence of the Board. He shall be custodian of all books, documents, furniture and other property belonging to the Board. He shall give proper and timely notice, in writing, of every regular and called meeting, to each member of the Board, and shall, as executive officer, perform such other duties as are assigned by the act establishing the Board, or by these by-laws, as the Board may from time to time direct. All communications from the Secretary to the Board shall be in writing.

Article III.

Meetings.

Section 1. The regular meetings of the Board shall be held on the second Thursday in May, July and November, at Harrisburg (unless otherwise ordered). At the meeting in July the election of officers shall be held. At the meeting in November the annual report shall be adopted, and at the meeting in May a public address on some sanitary topic shall be delivered.

Section 2. Special meetings shall be called by the President, at such time and place as he shall designate, whenever requested in writing by three members of the Board, one of whom shall be the Secretary.

Section 3. A majority of the members of the Board shall at any regular, called or adjourned meeting, organize and constitute a quorum for the transaction of business.

Article IV.

Order of Business.

Section 1. All meetings of the Board shall be called to order at the appointed hour by the President. In the event of his absence a chairman pro tempore shall be appointed.

Section 2. At regular meetings the business shall be conducted as follows:

1. The Secretary shall register the names of the members present.
2. The minutes of the last regular meeting shall be read.
3. The minutes of special meetings held since the last regular meeting shall be read.
4. Report of the Secretary.
5. Reports of standing committees.
6. Reports of special committees.
7. At the meeting in July, nomination and election of a president for the ensuing year; at the meeting in November, appointment of standing committees.
8. Unfinished business.
9. New business.
10. Adjournment.

Section 3. At special meetings the following shall be the order of business.

1. Registration of names of members present.
2. Reading of minutes, if called for.
3. Presentation of special subject.
4. Presentation of accounts.
5. Adjournment.

Article V.

Annual Report of the Secretary.

The Secretary shall, at the meeting in November, make a full report of his official acts during the year ending October 1, preceding, and accompany the same with recommendation of such measures as he shall deem necessary for the preservation of the public health and

the faithful execution of the law, and this report shall constitute the basis of the report of the Board to be presented to the Governor on or before the first Monday of December in each year, in accordance with the requirements of section ten of the act constituting this Board.

Article VI.

Standing Committees.

Section 1. The following standing committees shall be appointed by the President of the Board of the meeting in November.

1. An executive committee.
2. A committee on registration and vital statistics.
3. A committee on preventable diseases, disinfection and supervision of travel and traffic.
4. A committee on water supply, drainage, sewerage, topography and mines.
5. A committee on public institutions and school hygiene.
6. A committee on adulterations, poisons, explosives and other special sources of danger to life and limb.
7. A committee on sanitary legislation, rules and regulations.

Section 2. Such papers, communications, or other matter received by the Secretary as he may deem proper for the purpose, he shall forward to the chairman of the appropriate committee, after filing the titles and memoranda, which shall be recorded in the Secretary's office.

Section 3. All reports of committees shall be in writing.

Article VII.

Finances.

Section 1. All accounts against the Board shall be filed with the Secretary, and may be presented at any meeting of the Board, when they shall be acted on in open session; and all accounts allowed shall be endorsed "Approved by order of the State Board of Health and Vital Statistics," and shall be endorsed by the President and Secretary.

Section 2. The Secretary shall record in a book reserved for that purpose, all accounts of expenditures ordered or made by the Board and its several members, and shall, before presenting any bill, account or voucher to the Auditor General, cause a copy of the same to be recorded, and shall have stamped upon such voucher, account or bill the audit and date, as the executive committee shall provide.

Article VIII.

Executive Committee.

Section 1. The executive committee shall consist of not less than three members, including the Secretary of the Board, who shall be secretary of the committee.

Section 2. It shall have the general supervision of the finances, purchases, expenses and publication of the Board.

Section 3. Its office shall be in the city of Philadelphia until otherwise ordered.

Section 4. It shall hold meetings at least quarterly, and as much oftener as it shall deem necessary, and shall meet on the call of the chairman.

Section 5. With the approval of the Board or of the executive committee, the Secretary shall make a requisition upon the Secretary of Internal Affairs for such stationery, printed forms, clerical labor, apartments and furniture as shall be needed for the use of the Board.

Section 6. No purchases shall be made or expenses incurred except by order of the Board or of the executive committee; and the executive committee shall not have power to incur any indebtedness beyond the amount appropriated by law.

Article IX.

Rules of Order.

In conducting the business of the meetings of the Board, the parliamentary rules governing the Legislature of the State of Pennsylvania shall be adopted as far as they are applicable to its deliberations.

Article X.

Seal.

The seal of the Board shall be circular in shape, bearing on the circumference the words, "State Board of Health, Pennsylvania, 1885. Salus Populi Suprema Lex," and in the centre the coat of arms of the Commonwealth.

Article XI.

Amendments.

These by-laws may be altered or amended at any regular meeting of the Board by two-thirds vote of the members present.

REGULATIONS OF THE BOARD.

(R. I.)

Regulations in Regard to the Abatement and Removal of Nuisances.

Whenever a complaint is made in writing to the Secretary of the Board of the existence of a nuisance, he shall forthwith, as executive officer of the Board, investigate the matter and shall determine whether the alleged nuisance is detrimental to the public health, or the cause of any special disease or mortality; and in case he shall so find, then he shall notify the owner, agent or occupier of said premises, in writing, of such finding, and the executive officer shall thereupon order and direct the abatement and removal of the same within ——— days; and in the event of the failure of said owner, agent or occupier of said property to abate and remove the nuisance, then the executive officer may proceed to abate and remove the same, and may employ all the force necessary to do so, and shall proceed by warrant, arrest and indictment, to convict the party failing to obey said order of abatement and removal.

(R. II.)

Regulations for Preventing House Yards, Streets, Slaughter Houses, Stock Yards, Hog Pens, Bone-Boiling and Fat-Rendering and other Similar Establishments from Being or Becoming Prejudicial to the Public Health.

1. No bone boiling establishment or depository of dead animals shall be maintained or erected in any part of this Commonwealth, if in a city or borough, without a permit from the board of health or other health authority of said city or borough, or, if in a township, without a permit from the State Board of Health.

2. No permit shall be granted to any person or persons to carry on the business of boiling bones or animals until after a careful inspection of the locality, buildings, machinery and appliances, and of the plans for conducting the business by an accredited officer of the local board of health or other health authority, if in a city or borough, or

by an agent or inspector of the State Board of Health, if in a township.

3. The business of bone boiling shall not be allowed unless conducted under cover, the building to be provided with smoke consumers, and a due regard to be paid to cleanliness in the disposal of the offal.

4. No bone boiling establishment or depository of dead animals shall be maintained or erected in or near a closely inhabited neighborhood.

5. The floors of all bone boiling establishments and depositories for dead animals shall be paved with asphalt or cement or with brick or stone well laid in cement, or with some other impervious material, and shall be well drained. All such establishments shall have such an adequate water supply as to enable thorough cleanliness to be maintained.

6. Except in cities and boroughs or communities provided with an adequate system of sewers to receive the effluent from such establishments, the said effluent must be subjected to purification by filtration before being discharged into any stream or other body of water.

7. The boiling of bones or dead animals shall be conducted in steam-tight kettles, boilers or cauldrons, through which the foul vapors shall first be conducted through scrubbers and condensers and then into the back part of the ash-pit of the furnace fire to be consumed, or to be treated by other apparatus equally efficient in preventing or counteracting the offensive effluvia.

8. When bones are dried after boiling they should be placed in a close chamber through which shall be passed by means of pipes large volumes of fresh air, the outlet pipes terminating in the fire pit.

9. Offensive accumulations of carcasses, bones and offal must not be permitted to remain in the yards of such establishments, and a sufficient quantity of quick lime or other efficient deodorizer must be applied to the same during the months of June, July, August and September, to prevent their becoming offensive to the neighborhood.

10. The proprietors of bone boiling establishments and depositories for dead animals, not having on the 1st of January, 1901, permits to carry on the business, and violating these regulations, shall be liable to the penalties prescribed in the law of May 19, 1897.

11. The permit clerk of each local board of health or other municipal authority, shall have provided a book in which to enter the names of all persons in their respective municipalities engaged in the business of bone boiling or maintaining depositories of dead animals, also the location of such works, the character of the appliance as reported by the inspector, whether licensed or not, the number and date of permit, and remarks.

(R. III.)

Regulations in Regard to the Sanitary Supervision of Travel and Traffic.

Upon satisfactory information of the approach to, or transit through the Commonwealth of Pennsylvania, of infected persons or goods, it shall be the duty of the secretary, as executive officer of the board, to cause the same to be stopped at the State line, or, if found within the limits of the State, to cause such persons or goods to be removed from cars, stages, vessels, boats or other conveyances, and securely isolated and disinfected; and he may, if, in his judgment, the emergency is such as to demand it, call a meeting of the committee on travel and traffic, to which his action shall be submitted, with his reasons therefor, in writing. But, in cases coming under the jurisdiction of national or municipal quarantine authorities, he shall co-operate with said authorities in all such action.

(R. IV.)**Regulations in Regard to Disinterment and Transportation of Dead Bodies.****Disinterment of Bodies.**

Rule I. The removal of any body from its place of original interment is declared to be a nuisance dangerous to the public health, and is prohibited unless the same be done under the direction, and by permission of the State or local board of health.

Rule II. The above rule applies as well to the removal of a body from one grave or vault to another in the same cemetery as to its removal to another burial ground or place.

Rule III. The removal of dead bodies from any burial ground situated within the built-up portion of any city or borough is forbidden between April 1 and October 15.

Rule IV. The disinterment of the body of any person who died of any contagious or infectious diseases is strictly prohibited, unless by special authority, and upon such conditions as the State or local board of health may impose.

Rule V. The disinterment of bodies of persons who have died of Asiatic cholera, yellow fever, epidemic cerebro-spinal meningitis or spotted fever, small-pox or varioloid, diphtheria, bubonic plague, relapsing fever, typhus or ship fever, or scarlet fever, is prohibited, except by special permission of the State or local board of health; provided, however, that no such permit shall be granted within five years after the interment of such person.

Rule VI. When a body dead of any of the diseases mentioned in the preceding rule is to be disinterred the following precautions shall be strictly observed: (a) No one shall be present at the disinterment but those necessary to perform the labor and one male relative of the deceased. (b) A hermetically sealed zinc-lined box sufficiently large to contain the box, coffin or casket already in the grave shall be in readiness to receive the latter. (c) When within six inches of the top of the receptacle containing the body the earth shall be saturated with one-fifth per cent. solution (1-500) of the bichloride of mercury. (d) The receptacle containing the remains shall on no account be opened, but shall be at once placed in the box provided as above and hermetically sealed, and said box shall not be opened on arriving at the place of destination.

Transportation of Bodies.

Rule 1. The transportation of bodies dead of small-pox, Asiatic cholera, yellow fever, typhus fever or Bubonic plague is absolutely forbidden, except that the transportation of the bodies of persons dead of any contagious diseases from the West Indies, the Philippine Islands or China, if accompanied by a certificate that they have been prepared for transportation in accordance with the regulations of the United States Marine Hospital Service, may be permitted between December 1 and April 1 only.

Rule 2. The bodies of those who have died of diphtheria (membranous croup), scarlet fever (scarlatina, scarlet rash), glanders, anthrax or leprosy, shall not be accepted for transportation unless prepared for shipment by being thoroughly disinfected by (a) arterial and cavity injection with an approved disinfectant fluid; (b) disinfecting and stopping all orifices with absorbent cotton or jute (the latter preferred), and (c) washing the body with a disinfectant, or wrapping it in a sheet saturated with a strong solution of bichloride of mercury. After being disinfected as above, such body shall be enveloped in a layer of cotton not less than one inch thick, completely wrapped in a sheet and bandaged, and encased in an air-tight zinc, tin, copper or lead lined coffin or iron casket, all joints and seams hermetically soldered, and all enclosed in a strong, tight wooden box. Or, the body being prepared for shipment by disinfecting and wrapping as above, may be placed in a strong coffin or casket, and said coffin or casket encased in an air-tight zinc, copper or tin case, all joints and seams hermetically soldered, and all enclosed in a strong outside wooden box.

Rule 3. The bodies of those dead from typhoid fever, puerperal fever, erysipelas, tuberculosis, measles or other dangerous communicable diseases, not specified in Rule 1 and 2, may be received for

transportation when prepared for shipment by filling cavities with an approved disinfectant, washing the exterior of the body with the same, stopping all orifices with absorbent cotton or jute, and enveloping the entire body with a layer of cotton not less than one inch thick, and all wrapped in a sheet and bandaged and encased in an air-tight coffin or casket, provided that this shall apply only to bodies that can reach their destination within forty-eight hours from the time of death. In all other cases such bodies shall be prepared for transportation in conformity with Rule 2. But when the body has been prepared for shipment by being thoroughly disinfected by an undertaker or embalmer holding a certificate from a State Board of Health or a State Board of Undertakers, the air-tight sealing and bandaging with cotton may be dispensed with.

Rule 4. The bodies of those dead from diseases that are not contagious or communicable may be received for transportation when encased in a sound coffin or casket and enclosed in a strong outside wooden box, provided they can reach their destination within thirty hours from time of death. If the body cannot reach its destination within thirty hours from time of death it must be prepared for shipment by filling the cavities with an approved disinfectant, washing the exterior of the body with the same, stopping all orifices with absorbent cotton or jute, and enveloping the entire body with a layer of cotton not less than one inch thick, and all wrapped in a bandage, or antiseptic cotton blanket, and encased in an air-tight coffin or casket. But when the body has been prepared for shipment by being thoroughly disinfected by an undertaker or embalmer holding a certificate from a State Board of Health or a State Board of Undertakers, the air-tight sealing and bandaging with cotton may be dispensed with.

Rule 5. In case of contagious, infectious or communicable diseases the body must not be accompanied by persons or articles which have been exposed to the infection of the deceased, unless certified by the health officer as having been properly disinfected; and before selling passage tickets agents shall carefully examine the transit permit and note the name of the passenger in charge, and of any others purposing to accompany the body, and see that all necessary precautions have been taken to prevent the spread of the disease. The transit permit in such cases shall specifically state who is authorized by the health authorities to accompany the remains. In all cases where bodies are forwarded under Rule 2, notice must be sent by telegraph to the health officer at destination, advising the date and train on which the body may be expected. This notice must be sent by or in the name of the officer at the initial point to enable the health officer at destination to take all necessary precautions at that point.

Rule 6. Every dead body must be accompanied by a person in charge, who must be provided with a passage ticket and also present a full first class ticket marked "corpse" for the transportation of the body, and a transit permit showing the physician's or coroner's certificate, health officer's permit for removal, undertaker's certificate, name of deceased, date and hour of death, age, place of death, cause of death, whether communicable or non-communicable, the point to which the body is to be shipped, and when death is caused by any of the diseases specified in Rule No. 2, the names of those authorized by the health authorities to accompany the body. The transit permit must be in duplicate, and the signatures of the physician or coroner, health officer and undertaker must be on both the original and the duplicate copies. The undertaker's certificate and paster of the original shall be detached from the transit permit and securely fastened on the coffin box. The physician's certificate and transit permit shall be handed to the passenger in charge of the corpse. The whole duplicate copy shall be sent to the official in charge of the baggage department of the initial line, and by him to the Secretary of the State or Provincial Board of Health of the State or Province from which said shipment was made.

Rule 7. When dead bodies are shipped by express the transit permit must be made in triplicate and the signatures of the physician or coroner, health officer and undertaker must be on all three permits. Of these permits one copy shall be securely fastened upon the outside of the box, one copy shall be forwarded by the express agent to the party to whom the body is shipped, and one to the Secretary of the State or Provincial Board of Health of the State or Province from which said shipment was made.

Rule 8. Every disinterred body, dead from any disease or cause, shall be treated as infectious or dangerous to the public health, and must not be accepted for transportation unless said removal has been approved by the State or Provincial Health authorities having jurisdiction where such body is to be disinterred, and the consent of the health authorities of the locality to which the body is consigned has first been obtained; and all such disinterred remains must be enclosed in a hermetically sealed (soldered) zinc, tin or copper lined coffin or box.

Bodies deposited in receiving vaults will be treated and considered in the same way as buried bodies.

(R. V.)

Regulation in Regard to the Inter-State Notification of the Existence of Infectious and Contagious Diseases.

The following are the resolutions adopted by the International

Conference of Boards of Health, at Toronto, October 6, 1886, with slight verbal modifications:

Whereas, It is necessary for the protection and preservation of the public health that prompt information should be given of the existence of cholera, yellow fever or small-pox; be it resolved—

1. That it is the sense of the National Conference of States Boards of Health that it is the duty of each state and provincial board of health within whose jurisdiction any of said diseases may occur to furnish immediate information of the existence of such diseases to boards of health of neighboring states and provinces, and to local boards of such states as have no central board, in which the duty of notification shall lie upon the local boards.

2. That upon the prevalence or rumor of the existence of pestilential disease in any state or province, if positive definite information thereon be not obtainable from the proper health authorities, this conference holds that the health officials of another state are justified in entering the before-mentioned state or province for the purpose of investigating and establishing the truth or falsity of such reports.

3. That whenever practicable, the investigations undertaken under the preceding section shall be made with the co-operation of the state or local health authorities.

4. That any case which presents symptoms leading to serious suspicion of the existence of one of the aforesaid diseases shall be treated as suspicious, and reported as provided for in cases in which the diagnosis is certain.

5. That any case respecting which reputable and experienced physicians disagree as to whether the disease is or is not pestilential, shall be reported as suspicious.

6. That any suspected case respecting which efforts are made to conceal its existence, full history and true nature, shall be deemed suspicious and so reported.

7. That in accordance with the provisions of the foregoing resolution, the boards of health of the United States and Canada represented at this conference, do pledge themselves to an interchange of information as herein provided.

Addendum to regulation in regard to the inter-state notification of contagious and infectious diseases, adopted by the National Conference of State Boards of Health at Washington, September 8, 1887, and by the State Board of Health of Pennsylvania November 9, 1887.

1. All communicable diseases hereinafter mentioned, prevalent in certain areas, or which tend to spread along certain lines of travel shall be reported to all state and provincial boards of health within said areas or along said lines of communication.

2. In the instance of small-pox, cholera, yellow fever and typhus,

reports shall be at once forwarded, either by mail or telegraph, as the urgency of the case may demand.

3. In the instance of diphtheria, scarlet fever, typhoid fever, anthrax or glanders, weekly reports, when possible, shall be supplied in which shall be indicated as far as known the places implicated and the degree of prevalence.

(R. VI.)

Regulation for the Better Preservation of the Public Health, and to Limit the Progress of Epidemic (Contagious and Infectious) Diseases.

In virtue of the powers conferred by the act of Assembly of June 3, 1885, section five and six, P. L. 56 of the Laws of the Commonwealth of Pennsylvania, be it ordered by the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, and it is hereby ordered by the authority of the same:

Nuisances defined.

Section 1. That whatever is dangerous to human life or health, whatever renders the air or food or water or other drink unwholesome, and whatever building, erection or port or cellar thereof is overcrowded, or not provided with adequate means of ingress and egress or is not sufficiently supported, ventilated, sewered, drained, cleaned or lighted, are declared to be nuisances, and to be illegal; and every person having aided in creating or contributing to the same, or who may support, continue or retain any of them shall be deemed guilty of a violation of this regulation, and shall be liable to a penalty of not more than one hundred dollars.

House refuse
garbage, etc., not
to be exposed.

Sec. 2. No house refuse, offal, garbage, dead animals, decaying vegetable matter or organic waste substance of any kind shall be thrown on any street, road, ditch, gutter or public place, and no putrid or decaying animal or vegetable matter shall be kept in any yard, house, cellar or adjoining out building or grounds for more than twenty-four hours.

Pig pens to be
properly con-
structed and kept
clean.

Sec. 3. No pig pen shall be built or maintained within one hundred feet of any well or spring of water used for drinking purposes, or within thirty feet of any street or any inhabited house, or unless constructed in the following manner, viz: So that the floor or floors of the same shall be not less than two feet from the ground, in order that the filth accumulating under the same may be easily removed.

Sec. 4. No privy vault, cess-pool, or reservoir into which a privy, water closet, cess-pool, stable or sink is drained, unless it is water tight, shall be constructed, dug or permitted to remain within one hundred and fifty feet of any well, spring or other source of water used for drinking or culinary purposes; unless the surface of such vault, cess-pool or reservoir is at a lower level than the bottom of such well. Earth privies and earth closets, with no vault, pit or depression below the surface of the ground, shall be excepted from this regulation, but sufficient dry earth or coal ashes must be used to absorb all the fluid part of the deposit.

Privies not to remain near wells of drinking water.

Sec. 5. All sewer drains shall be water tight.

Sec. 6. No sewer drain shall empty into any lake, pond, dam, reservoir, or other collection of water used for drinking purposes, or into any standing water.

Sewer-drains not to contaminate water supply.

Sec. 7. All pipes connecting a water closet with a soil pipe shall be trapped, each separately. All waste pipes shall be trapped, each separately, and close to the connections with each bath, sink, bowl or other fixture, unless adequate provision is made for downward ventilation through said water pipes, in which case one trap may serve for several fixtures.

Sec. 8. All soil pipes shall be carried at their full size through the roof and left open. A provision shall also be made for admitting air to the house drain side of the main trap, if such trap exists.

Sec. 9. The joints in vitrified pipes shall be carefully cemented under and around the pipe, and the joints in cast iron pipes shall be run and calked with lead.

Sec. 10. All changes in direction shall be made with curved pipes. All joints and pipes shall be made air-tight.

Sec. 11. The following named diseases are declared to be communicable and dangerous to the public health, viz: Small-pox (variola, varioloid), cholera (Asiatic or epidemic), scarlet fever (scarlatina, scarlet rash), measles, diphtheria (diphtheritic croup, diphtheritic sore throat), typhoid fever, typhus fever, yellow fever, spotted fever (cerebro-spinal meningitis), relapsing fever, epidemic dysentery, hydrophobia, (rabies), glanders (farcy), tuberculosis (consumption), bubonic plague and leprosy, and shall be understood to be included in the following regulations, unless certain of them only are specified.

Diseases dangerous to public health enumerated.

Householders re-
quired to report.

Sec. 12. Whenever any householder knows that any person within his family or household has a communicable disease, dangerous to the public health, he shall immediately report the same to the school board, giving the street and number, or location of the house.

Physicians re-
quired to report.

Sec. 13. Whenever any physician finds any person whom he is called upon to visit has a communicable disease, dangerous to the public health, he or she shall immediately report the same to the school board giving the street and number or location of the house, on the receipt of which report the said board shall immediately notify the teacher or principal of every school in the district, instructing said teachers or principals to dispense with the attendance of all pupils residing in the family in which such disease exists.

School teachers to
be notified.

Physicians not to
be sued for mis-
takes in obeying
this regulation.

No physician who may, in good faith in obedience to this regulation, report a case as one of communicable disease which subsequently proves not to be such, shall be liable to a suit for damages for such error in reporting. It shall be the duty of such physician and all other attendants upon persons affected with such diseases to avoid exposure to the public of any garments or clothing about their own persons that may have been subjected to the risk of infection.

Exposure of in-
fected persons or
things forbidden.

Sec. 14. No person shall, unless by permit of a board of health, carry or remove from one building to another any patient affected with any communicable disease, dangerous to the public health. Nor shall any person, by any exposure of any individual so affected, or of the body of such individual, or of any article capable of conveying contagion or infection, or by any negligent act connected with the case or custody thereof, or by a needless exposure of himself or herself, cause or contribute to the spread of disease from any such individual or dead body.

Funeral after in-
fectious diseases
forbidden.

Sec. 15. There shall not be a public or church funeral of any person who has died of Asiatic cholera, small-pox, typhus fever, diphtheria, yellow fever, scarlet fever or measles, and the family of the deceased shall in all such cases limit the attendance to as few as possible, and take all precautions possible to prevent the exposure of other persons to contagion or infection; and the person authorizing the public notice of death of such person shall have the name of the disease which caused the death appear in such public notice.

Public notice of
cause of death re-
quired.

Sec. 16. No person suffering from or having very recently recovered from small-pox, scarlet fever, diphtheria, yellow fever or measles shall expose himself, nor shall any one expose a person under his charge in a similar condition, in any public conveyance, without having previously notified the owner or person in charge of such conveyance of the fact of such condition as above stated. And the owner or person in charge of such conveyance must not, after the entry of any person so infected into his conveyance, allow any other person to enter it without having sufficiently disinfected it.

Public conveyances not to be infected.

Sec. 17. No person shall let or hire any house or room in a house in which a communicable disease, dangerous to the public health, has recently existed, until the room or house and premises therewith connected have been disinfected and for the purpose of this section, the keeper of a hotel, inn or other house for the reception of lodgers, shall be deemed to let or hire part of a house to any person admitted as a guest into such hotel, inn or house.

Infected conveyances not to be used until disinfected.

Infected houses or rooms not to be let.

Sec. 18. Members of any household in which small-pox, diphtheria, scarlet fever or measles exists shall abstain from attending places of public amusement, worship or education, and, as far as possible, from visiting other private houses.

Isolation of families required.

Sec. 19. The clothing, bed-clothing and bedding of persons who have been sick with any communicable disease, dangerous to the public health, and the rooms which they have occupied during such sickness, together with their furniture, shall be disinfected as directed in the circulars of this Board.

Disinfection required.

Sec. 20. No animal affected with a communicable disease, dangerous to the public health, shall be brought within the limits of this Commonwealth, and the bodies of such animals dead of such disease or killed on account thereof, shall be buried with quicklime under four feet of earth or burned, but shall not be buried within five hundred feet of any residence, or of any source of water supply.

Infected animals to be excluded.

Sec. 21. No milk which has been watered, adulterated, reduced or changed in any respect from its natural condition by the addition of any foreign substance, shall be held, kept or offered for sale.

Milk not to be adulterated.

(R. IX.)

Regulation Authorizing the Secretary to Place, or Cause to be placed Placards Upon Houses in Which Certain Communicable Diseases Exist.

Section 1. Whenever the Secretary of the State Board of Health shall have satisfactory information that any of the following diseases: cholera, small-pox (variola or varioloid), scarlet fever (scarlatina), typhus fever, yellow fever, relapsing fever, diphtheria (diphtheritic croup), membranous croup or leprosy exist in any city, borough, district or place having no local board of health, or in which the sanitary laws or regulations are inoperative, he shall have authority to place or cause to be placed, in a conspicuous place or places upon or near the house or premises in which said case may be located a placard or placards upon which shall be printed in large letters the name of the disease from which the person or persons in said house or premises may be suffering, as aforesaid, as the case may be: Provided, That variola or varioloid shall be placarded as small-pox, and that diphtheritic croup and membranous croup shall be placarded as diphtheria, and that scarlatina shall be placarded as scarlet fever, and said placard or placards shall remain therein until such time as the rules and regulations established by this Board regarding the destruction or disinfection of infected bedding, clothing or other articles which have been exposed to infection, and the disinfection of houses and premises have been fully complied with: Provided, That in addition to the placarding aforesaid, or in lieu of the same, the Secretary may place or cause to be placed a guard or guards upon said house or premises.

Sec. 2. The head of the family occupying any house or premises upon or near which said placard or placards aforesaid may be placed, shall, upon conviction before any mayor, burgess, alderman, police magistrate or justice of the peace of the city, borough or township in which said offense was committed be liable for the fine or penalty provided by the act of Assembly of June 8, 1895, in any case where such placard or placards are removed, distributed, covered up, taken down or destroyed with his or her knowledge or consent before the time provided by section one of this regulation; said fine to be not less than five nor more than one hundred dollars, in default of payment where such person or person so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days.

(R. X.)

Regulation Requiring Burials to be a Certain Depth Below the Surface of the Ground.

Section 1. The burial of a body at an insufficient depth below the surface of the ground is hereby declared to be a nuisance prejudicial to the public health.

Section 2. In all cities, boroughs, districts and places having no local board of health, no body shall be buried at a less depth than six feet below the surface of the ground in populous districts, or less than four feet below the surface of the ground in rural districts.

(R. XI.)

Regulation for the Disinfection of the Persons, Excreta, Effects and Dwellings of those Sick with Communicable (Contagious and Infectious) Diseases.**To Disinfect the Sick-room.**

1. All glasses, cups or other vessels used by the patient shall be cleansed in boiling water before being used by others. And all foods and drinks touched and not consumed by the sick shall be burned or buried.

2. The discharge from the bowels and from the kidneys shall be received on their very issue from the body into vessels charged with disinfectants, and, after thorough disinfection, emptied into a closet connecting with a sewer or, in the country, buried at least one hundred feet from any well or running stream. In no case shall they be thrown on the surface of the ground or into a running stream of water. Rags and paper which have become contaminated with any discharge shall be burned at once in a strong fire. It is well, in all contagious diseases, to place a piece of rubber cloth under the patient to prevent the discharges from soaking into the bed.

3. All articles of the patient's clothing, all sheets, towels, napkins, bandages or sponges used about the sick, must, before being taken from the sick room, be thrown into a tub containing several gallons of a solution of chloride of lime (standard solution No. 1), and remain in it three hours. Never carry any dry clothes from the sick room without disinfection. After disinfection they must be thoroughly boiled.

5. After death the body must at once be wrapped in a sheet saturated with a solution of corrosive sublimate (standard solution No. 2), and buried as soon as possible.

6. Burn as many of the articles which have been about the sick as possible.

7. Standard Disinfecting Solutions Recommended by the State Board of Health.

1. Standard Solution No. 1.—Dissolve chloride of lime or bleaching powder of the best quality (containing at least twenty-five per cent. of available chlorine) in soft water in the proportion of four ounces (a quarter of a pint) to the gallon.

*2. Standard Solution No. 2.—Dissolve corrosive sublimate and permanganate of potash in soft water in the proportion of two drachms (a heaping teaspoonful) of each to the gallon.

3. Standard Solution No. 3.—To one part of hypochlorite of soda add five parts of soft water.

4. Standard Solution No. 4.—Dissolve corrosive sublimate in water in the proportion of four ounces to the gallon. One fluid ounce (two tablespoonsful) of this solution to the gallon of water is sufficiently strong. Articles should be left in it for two hours. One gallon of standard solution No. 1, may also be mixed with nine gallons of water, and used in the same way. No article should be allowed to leave the infected room until it has been either disinfected or boiled.

8. To disinfect Discharges from the Patient.

Use standard solutions, Nos. 1, 2 or 3, keeping a pint of the solution used constantly in the vessel ready for any emergency. Let the discharge be passed directly into the solution, then let a pint more of it be added, and let the whole stand sometime to be thoroughly acted upon before being thrown into the sewer or being buried. Ordinary whitewash, freshly made or preserved by pouring a thin film of coal oil on its surface, is also very useful for this purpose. These discharges should never be thrown into privy or cess-pool, nor into a running stream, nor on the surface of the ground.

9. To Disinfect Clothing, Towels, Napkins, Bedding and Such Textile Fabrics as Can be Washed.

Burn as much as possible. Use standard solution No. 4, one ounce to the gallon of water, or use one gallon of solution No. 1 in nine gal-

*Note.—This solution is highly poisonous. 2. It requires a contact of one hour to be efficient. 3. It destroys lead pipes. 4. It is without odor.

Corrosive sublimate solution should be kept in wooden or crockery vessels.

lons of water. Let the goods soak in the solution for at least three hours before they leave the room. Stir them up so that the solution may get all through the goods. After disinfection boil the goods thoroughly.

10. To Disinfect Water Closets, Urinals, Sinks and Cess-Pools.

5. Carbolic Acid Solution.—Mix one pint of carbolic acid with two and a half gallons of water.

Standard Solution No. 4, diluted with three parts of water, may also be used in the proportion of one gallon (of the solution) to every four (estimated) of the contents of the vault. Standard solution No. 1 would require to be used gallon for gallon of the material to be disinfected. Dry chloride of lime may be sprinkled over the contents of a privy, or standard solution No. 2 may be made up by the barrel, and four or five gallons be applied during an epidemic.

To Disinfect the Room after Death or Recovery.

The room must be vacated. The paper should be carefully scraped from the walls. Thorough ventilation for several days, and thorough washings of all surfaces with one of the disinfecting solutions, say, one pint of standard solution No. 4 to four gallons of water, or a quarter of a pint of solution of hypochlorite of soda to a gallon of water must be effected. The walls and ceiling, if plastered, should be washed with this solution and then whitewashed. All dust must be carefully washed (not brushed or swept) away from ledges, cracks, corners and crevices.

Sulphur Fumigation.

To use this effectively, two pounds of sulphur should be burned in a room ten feet square. Every opening in the room—flues, doors, windows, cracks and crevices—must be closed, except the door by which the disinfector is to escape; closet doors and bureau drawers should be opened wide, and all woolen articles which have been in the room during the sickness hung on lines, being spread out and opened up as much as possible. The sulphur is to be burned in an iron kettle or other vessel set in a tub containing a little water to guard against fire. A small quantity of water should be evaporated at the same time. A little alcohol or kerosene must be poured upon the sulphur by means of which it may be ignited. Leave the room quickly, for the fumes are highly poisonous when breathed, and close the door tightly. Let the room remain closed twenty-four hours or more. Then air thoroughly for at least twenty hours.

Formaldehyde (Formalin).

This comparatively new substance promises to supersede sulphur as an aerial or gaseous disinfectant. Not only does it appear to be more penetrating and more destructive to germ life, but it possesses the very great advantage of not injuring the colors of fabrics, or wall papers, or tarnishing and corroding metallic surfaces. It is also known as Formic Aldehyde, and is a gas developed by the action of a red hot surface of platinum on the vapor of wood alcohol, or wood spirit (methyl-alcohol). A saturated (40 per cent.) solution of this gas in water is sold under the name of Formalin, Formol or Formalose.

The gas may be generated directly in the apartment to be disinfected, the same precautions being taken as regards stopping up crevices as in using sulphur fumes. Formalin may be mixed with water in the proportion of two parts to the hundred, and applied with a sprayer directly to surfaces to be treated, or may be forced undiluted into the closed apartments through a key-hole or other orifice, in the form of vapor or atomized fluid. A special apparatus known as a generator or regenerator is needed for this purpose.

Another mode of application is to dilute Formalin with an equal quantity of water, and evaporate it in wide pans by gentle heat. For every 1,000 cubic feet of air space, a pint of this mixture is required, or it may be evaporated from sheets moistened with a mixture of one part of Formalin to two of water and hung up in the room. For this method, three pints of the mixture should be evaporated for every 1,000 cubic feet of air space. The temperature of the room should not be allowed to fall below 60 degrees F.

There is testimony of convincing character both from scientific experiments and practical health officers as to the efficiency of all these modes of application.

After the disinfection of apartments by Formaldehyde gas, the latter should be neutralized by ammonia gas, evolved from water of ammonia by heat, or by evaporation from water of ammonia sprinkled upon the floor. The quantity of water of ammonia required for neutralization, after the above-named method, is as follows: three pints of water of ammonia for each quart of Formaldehyde.

(R. XII.)

Regulation for the Control and Management of Piggeries in the State of Pennsylvania.

1. This Board declares the keeping of pigs an offensive industry.
2. Hog yards and piggeries will not be permitted within 200 feet

of any natural stream or water course, and the drainage of a piggery shall in no case be permitted to reach any natural stream until said drainage has been purified.

3. All pig pens shall be constructed with water-tight floors, either of plank or cement, which must be elevated at least ten inches above the ground.

4. The feeding of animals dead from natural causes to pigs will not be allowed. Offal should not be fed to pigs for at least a month before they are killed. The animals to be killed should be removed from the pen where offal is fed and should be fattened on grain. Offal from hogs should not be fed to hogs, as disease is liable to be communicated to sound animals in this way. Offal from hogs must be burned or buried.

5. All pig pens must be daily cleansed and thus kept free from all offensive odors.

6. Where offal from slaughter houses is fed to pigs, the yards should be cleaned at least twice a week, the refuse being buried or burned.

7. Where garbage or offal is fed to pigs, the troughs, basins or boxes should be cleansed and dried as often as necessary to prevent unwholesome odors from arising.

8. No hog ranch or piggery for garbage or offal feeding, where more than fifty head of swine are kept, shall be established or maintained without a permit from a health authority.

(R. XIII.)

Regulation Preventing the Pollution of Streams and Other Public Waters by the Refuse and Sewage from Tanneries.

1. The throwing or otherwise depositing of hair, lime, fleshings, trimmings, spent tan bark and all other solid waste from tanneries in streams, ponds, lakes or other public waters, is absolutely prohibited as entirely unnecessary, and because, under certain conditions, it becomes injurious to the public health.

2. All sewage produced by washing hides in any and all processes, as well as all spent tan liquors, shall, before being run into streams or other waters used as public water supplies, be filtered through beds of gravel. This can readily be accomplished by setting the works a short distance back from the water.

3. In cases where sulphuric acid, chromic acid, or other acids or salts injurious to human health are employed in tanneries, they shall be recovered, or neutralized before being thrown into any stream used as a public water supply.

(R. XIV.)

Regulation Forbidding the Dumping of Night-Soil in Public Waters.

The dumping of night-soil in any river, stream, lake, pond or other public water in this Commonwealth constitutes a nuisance prejudicial to the public health and is hereby forbidden.

(R. XV.)**Regulation with Regard to the Depositing of Night-Soil.**

1. The depositing of night-soil on the surface of the ground is hereby declared to be a nuisance prejudicial to the public health.

2. This material must be placed in pits or trenches dug for the purpose and each deposit covered with fresh earth and lime.

3. When the contents of such pit or trench have reached within one foot of the surface they must be covered with fresh earth and lime, up to the level of the ground.

4. The contents of such pit or trench must then not be disturbed for six months, at the end of which time they will be fit to use as a fertilizer.

5. Any person violating or failing to obey this regulation will be liable to a fine of one hundred (\$100) dollars.

(R. XVI.)**Regulation to Prevent the Pollution of the Waters of the Schuylkill River and its Tributaries.**

1. No privy, urinal or other construction of easement, shall be placed or allowed to remain over the waters of or directly upon the banks of the Schuylkill river, the canals of the Schuylkill Navigation Company, or any tributaries of said river or canals above Fairmount Dam.

2. No person shall either directly or indirectly, or by dumping from a cart or other conveyance or receptacle, deposit human excrement in or on the banks of said waters.

3. No privy, vault, cess-pool or reservoir into which a privy, water closet or cess-pool is drained, shall be constructed, dug or permitted to remain within one hundred and fifty feet of the banks of said waters unless the same is thoroughly cemented so that it shall be water tight.

4. No boat, either for public or private use, whether steam boat, canal boat, house boat, ferry boat, bath house or other construction used to float, steam or sail upon said water, shall have kept or maintained thereon a water closet, urinal or other construction of easement which shall permit excrement to empty in said waters. All boats carrying passengers or crews shall be provided with watertight tanks or receptacles which shall be kept in a sanitary condition satisfactory to the State Board of Health and to the boards of health of cities and boroughs through which said boats may pass, and the contents thereof shall be deposited at least one hundred and fifty feet from high water mark of the shores of said river and its tributaries.

5. No excrement shall be deposited either directly or indirectly upon the ice of said waters.

(R. XVII.)

Regulation for Domiciliary Quarantine or Isolation for the Restriction of Communicable Diseases.

Rule 1. The isolation of any person afflicted with small-pox (varioloid) or scarlet fever (scarlatina or scarlet rash), and of the nurse or nurses attendant upon such person or persons, shall be absolute. Such isolation shall continue for a period of not less than four weeks from the first appearance of the eruption, and as much longer as may be necessary to secure complete desquamation and a healthy condition of the throat and nose, the necessary period to be determined by the health officer in charge, or his assistant.

Rule 2. The isolation of the person affected with diphtheria or so-called laryngeal or membranous croup, and of the nurse or nurses attendant upon such person shall be absolute, and shall be governed by the following regulations:

Section 1. In all cases of sore throat which may reasonably be suspected of being diphtheria, a report should forthwith be made by the attending physician of such fact to the health officer or board of health.

Section 2. Specimens should be taken at once by the health officer, or attending physician from the throat or from the throat and nose of such suspected case, and sent to an approved bacteriological laboratory for examination.

Section 3. During the time between the sending of the specimen and the receipt of the report, strict isolation of the patient should be maintained.

Section 4. Whenever the presence of the bacillus diphtheriae is in any manner reported by an approved bacteriologist, the house should forthwith be quarantined and a plainly printed notice thereof, including the name of the disease, should be posted in a conspicuous place thereon and a guard stationed if necessary.

Section 5. It is the duty of the attending physician to report to the local health officer the names and addresses of those who have been exposed to diphtheria.

Section 6. It is the duty of the attending physician or local health officer to take and forward to the laboratory of the State Board of Health or other approved bacteriological laboratory, specimens from the throats of those exposed to diphtheria, and, pending a report thereon, to see that isolation is maintained.

Section 7. It is the duty of the health officer to place in quarantine all those who, after exposure to cases of clinical diphtheria, are reported from the laboratory to be infected with bacillus diphtheriae.

Section 8. After proper disinfection quarantine shall be removed from the houses in which diphtheria has been diagnosed when synchronous culture, taken from the noses or throats of all persons quarantined, have been pronounced free of diphtheria bacilli by a bacteriologist approved by the State Board of Health.

Section 9. After the laboratory diagnosis of diphtheria has been given it shall be the duty of the health officer to see that specimens from both nose and throat of the patient, are forwarded by himself or the attending physician at least once a week after clinical symptoms have subsided, until negative reports for both nose and throat are obtained.

Section 10. Those who have been brought in contact with diphtheria patients, and in whose throats diphtheria bacilli have been found may be released from quarantine when both nose and throat cultures, on examination by a bacteriologist approved by the State Board of Health, no longer show the presence of diphtheria bacilli.

Section 11. When the diphtheria bacillus exists for a period of more than three weeks after the disappearance of all throat symptoms, the bacillus should be isolated in pure culture and its virulence tested upon guinea pigs, as the request of the health officer. If the bacillus is not found virulent, quarantine may be released. As these experiments will take from five to ten days, later specimens ought to be sent to the laboratory, since they may show the absence of all diphtheria bacilli before complete determination.

Section 12. All specimens sent to the laboratory should be reported upon, in writing, by the bacteriologist, upon the morning following their receipt: Provided, however, That such report should be made by telegram upon request, at the expense of the person making the request. In country districts, where it is not possible to use

the laboratory findings as a means of regulating quarantine, those suffering from diphtheria, shall be quarantined for a period of not less than four weeks from the appearance of the disease.

Rule 3. The isolation of the person or persons affected with typhus fever, cholera, plague, and of the nurse or nurses attendant upon any person, shall be absolute until such time as the health officer in charge shall pronounce the danger from infection as having passed.

Rule 4. Children living in a house infected with measles, scarlet fever, diphtheria, or small-pox, should be excluded from school, public or private: Provided, that when children have been removed from an infected house, the period of thirty days required by the State law, before the expiration of which they cannot attend school, shall date from the time of their removal from the infected house.

Rule 5. All cases of typhoid fever should be reported to local health officers, not for the purpose of establishing isolation of the home, but in order that the origin of the disease may be investigated and thus an educational campaign may be systematically carried out against this disease.

Rule 6. All cases of tuberculosis should be reported to local health officers, not for the purpose of establishing isolation of the home, but in order that an educational campaign may be systematically carried out against this disease.

Rule 7. All cases of leprosy should be reported to the State health officials.

Rule 8. All cases of pneumonia should be reported to local health officers, not for the purpose of establishing isolation of the house, but in order that further knowledge concerning this most dangerous disease may be obtained, and that an educational campaign may be carried out for its restriction.

Method of Disinfection During the Presence of the Disease.

Rule 9. During the progress of an infectious disease disinfection should be carried out as follows:

Section 1. For diphtheria and tuberculosis, the destruction or disinfection of all cloths and clothing, or other articles that have been soiled by the discharges from the throat and nose; the thorough disinfection of the sick room and its contents at conveniently frequent intervals if the disease is tuberculosis.

Section 2. For typhoid fever, dysentery and intestinal tuberculosis a thorough disinfection of all excreta from the patient.

Section 3. For cholera, typhus fever, plague, small-pox, scarlet fever, and intestinal tuberculosis, a thorough disinfection of the excreta and of all cloths, personal or bed clothing, etc., that have been used by the patient.

Release from Isolation or Quarantine.

Rule 10. Section 1. In all cases of isolation because of the existence of a directly communicable disease, such isolation should be continued until thorough disinfection has been made of the patient or patients, or the nurse or nurses, of the room or rooms in which such persons have been isolated, and of all clothing, furniture, bedding, etc., that have been in such rooms.

Section 2. All susceptible individuals who have been exposed to small-pox, typhus fever, diphtheria, plague, or scarlet fever should be kept in isolation until a thorough disinfection of their person and clothing can be carried out; and they should be excluded from places where people congregate, until the recognized period of incubation for the individual disease to which they have been exposed shall have passed; but in the case of school children they must be excluded from school until the period of thirty days required by the State law shall have expired.

Section 3. All such exposed persons should be kept in isolation or under observation, as the circumstances may require, until the period of incubation for the individual disease to which exposure has occurred has passed.

Section 4. It is understood that the time of house quarantine will not apply in cases where the patient is removed from a house by death or otherwise. In such cases the persons or rooms under isolation should be disinfected, and isolation may be discontinued at the direction of the board of health, the exposed persons still being kept under observation during the recognized period of incubation.

Section 5. The responsibility for the release of isolation should, in all cases, rest upon the sanitary official.

Section 6. Disinfection of the exposed persons and of rooms, bedding, furniture, clothing, carpets, hangings, etc., where the infected patients have had residence, should in all cases be required before isolation or other restrictions are removed.

Section 7. In all cases where disinfection of a room and its contents is required, after the death or recovery of any person ill with an infectious disease, the entire responsibility should rest upon the local board of health, and the expense should be borne by the municipality where the disease occurs.

(R. XVIII.)

Regulations for the Sanitary Construction, Management and Control of Industrial Camps.

Reg. 1. The owner, manager, agent or foreman of any lumbering camp, mining camp, sawmill camp, railway construction camp, or

other industry requiring the establishment of a camp, shall be responsible for the proper execution and enforcement of any regulation herein contained, or of any clause of any Health Regulation governing in any case or circumstance.

Reg. 2. Any house, tent, or other dwelling occupied by the employes engaged in any industry shall contain at least 300 cubic feet of air space for every occupant thereof. In order to accommodate fifty men, therefore, a building should be fifty feet long, thirty feet broad, and ten feet high. It shall further be provided with such means of ventilation as hereinafter set forth, or other equally effective method. The floor of every dwelling shall be constructed of boards or planks, or other material equally suitable for the purpose, raised on supports at least one foot from the ground, and so made that it shall be tight. Every such dwelling, other than a temporary tent, not exceeding 10 x 15 feet, shall be supplied with adequate lighting; and in all wooden or iron structures the windows must be so constructed that they can be opened.

Reg. 3. The method of ventilation of every dwelling in which a stove or furnace is used shall be such as will provide fresh air to the extent of that supplied in the following example designed for a building to accommodate fifty men. When heated by an oblong stove or enclosed furnace, the stove pipe should be carried to an opening or openings in the roof as in the subjoined cut, both to distribute heat and to assist in ventilation. The fresh air duct with free opening into the fresh air, may be constructed of either wood or galvanized iron beneath the stove, and have a capacity of not less than one foot square. The rear part of the stove should be enclosed in galvanized iron or zinc, resting on the floor, the fresh air being delivered under this part of the stove to be warmed as it passes into the room. The exits for foul air may be constructed either of wood or galvanized iron, should be open near the floor as seen in the diagram attached thereto, and should consist of four ducts, each having an area of not less than six inches square leading to the space surrounding the stove pipe near its exit and properly protected against fire. The temperature of the room should be maintained at from 60 to 65 degrees Fah., and large shallow pan supplied with water, shall be kept on the stove to supply moisture to the air.

Reg. 4. In connection with every camp, works or dwelling coming under these Regulations there shall be constructed a Contagious Disease Hospital large enough to accommodate at least one-tenth of the full number of employes, or in lieu thereof a double-walled tent or tents shall be kept on hand with proper flooring and with facilities for heating and ventilation, equal to those provided in the example herein described, for the reception of any employes who may become sick; and should any disease of a contagious nature, as

defined by the act of June 18, 1895, "For the Better Protection of the Public Health in the Several Municipalities of this Commonwealth," break out, the hospital building or tent must be located by the physician in charge of the patient, in a position satisfactory to the County Medical Inspector or any officer authorized by the State Board of Health to inspect the said camp or works.

Reg. 5. Every camp shall be equipped with a separate building to be used as a wash house or laundry, and attached thereto a room or if preferred, a separate building or tent equipped with a stove and tubs for bath purposes, in a manner satisfactory to any officer authorized to inspect the camps or works.

Reg. 6. Every camp shall be supplied with a building or tent properly constructed and set apart as a kitchen or cook house, and having a dining-room or eating-room in connection therewith, with proper conveniences for the cleanliness and comfort of employes.

Reg. 7. Proper buckets shall always be kept on hand, in which all refuse, whether liquid or solid, can be placed, and the refuse must at regular times be removed to a safe distance from the kitchen, and be so deposited as not to create a nuisance or contaminate the drinking water. A properly constructed drainage system satisfactory to the County Medical Inspector or other authorized officer, may be utilized in lieu of slop-buckets.

Reg. 8. Latrines, or earth or other closets located to the satisfaction of the physician employed shall be constructed at every camp or work, and must be located and maintained in a sanitary condition satisfactory to the medical officer of the works, especial care being taken that the contents thereof or drainage therefrom shall enter no stream, lake or pond.

Reg. 9. The stables in connection with any works or camp must be so located as to not contaminate the water supply of the camp or of any neighboring community, and must not be less than 125 feet distant from any dwelling or kitchen. In large camps this distance may be increased if thought necessary by the County Medical Inspector or other authorized health officer.

Reg. 10. The location of the buildings of any camp shall be made with a due regard to its healthfulness, and any new camp or works located without the previous approval of the authorized health inspector must be moved to a proper location, if afterwards the site is found to be undrained, unhealthy, or wanting in any adequate or wholesome water supply; and any camp, works or dwelling, if proved insanitary or unhealthful, shall have instituted such drainage or have introduced such a water supply as is satisfactory to the authorized health officer.

Reg. 11. Employers of labor in industrial camps shall contract with one or more qualified medical practitioners for the medical

and sanitary supervision of their employes and works, who shall inspect the camps, dwellings or works at least once a month, and oftener if the health conditions of any camp, or works or dwelling require it, and supply medical attendance and medicines to the employes.

Reg. 12. The owner, manager, agent or foreman or other person in charge of any lumbering camp, mining camp, or other industry on which men are employed, shall require a certificate of recent successful vaccination of each employe when he is engaged by the company or its agent; and where evidence is not forthcoming, it shall be their duty before employing any person, to obtain such evidence of such vaccination.

Reg. 13. Should any suspected communicable disease, as defined under the act of June 18, 1895, "For the Better Protection of the Public Health of the Several Municipalities of this Commonwealth," break out in any camp, works or dwelling, the employer or his employe or agent in charge of any camp, works, or dwelling, shall immediately send notice to the physician employed, who shall at once notify the State Board of Health or some officer thereof, of the outbreak. The employer or his employe or agent in charge of any camp, works or dwelling, shall equally with the physician employed, be responsible for any neglect to notify the State Health authorities.

Reg. 14. Every measure required to be taken by a Local Board of Health or by any medical health officer, sanitary inspector or other health officer under the act of June 8, 1895, or any regulation made thereunder by the State or Township Board of Health, must at once be taken by the employer and his employes or agents, or the physician employed by the same, whenever any suspected communicable disease included therein, breaks out in any camp, works or dwelling to which these regulations apply. Any neglect on the part of any employer, manager, foreman or agent or the physician employed, shall be punishable in the manner provided by the act of June 18, 1895.

Reg. 15. For the proper enforcement of these regulations the Secretary of the State Board of Health or the County Medical Inspector, or the Sanitary Agent of the Township, on notification by the owner or his duly constituted agent or foreman of the contemplated establishment of any camp or works, shall at the earliest practicable time thereafter, inspect the location of the camp, works or dwelling, and carry out the true intent and meaning of these Regulations in relation thereto.

Reg. 16. Whenever complaint is made to the State Board of Health, by ten responsible householders, or by a County Medical Inspector, or by a Township Board of Health, that owing to failure to comply with these regulations, a nuisance prejudicial to the public

health exists in any camp, works or dwelling to which these Regulations apply, or that the requirements of the law of June 18, 1895, for preventing the spread of contagious diseases, are not strictly enforced, the Secretary of said Board shall make or cause to be made an inspection to determine the truth of such complaint, and if the same be found true, shall take the necessary steps to enforce these Regulations. The expense of all inspections whether made by the Secretary of the State Board of Health, by the County Medical Inspector, or by the Sanitary Agent of the Township, whether made in response to a complaint or by the request of the owner, or agent of the camp, and the expense of maintaining quarantine, and of providing medical and nursing care and the necessities of life for those in quarantine, shall be met by the owner of the camp, or by his agent.

(R. XIX.)

Regulations for Controlling the Disbursement of the Fund of Fifty Thousand Dollars Placed at the Disposal of the State Board of Health by Act of Assembly, March 26, 1903, to aid in the Suppression of Small-pox in Pennsylvania.

Reg. 1. This fund shall not be used for any other purpose than for assisting local communities during the prevalence of small-pox for the period covered by the act and for meeting just and reasonable expenses incurred in the suppression of that disease.

Reg. 2. Application for assistance from this fund must be made by legally constituted authorities.

Reg. 3. No assistance will be granted except on vouchers receipted and signed by legally constituted officials.

Reg. 4. School boards acting as township boards of health under the law of April 11, 1899, applying for aid must furnish sworn evidence that they have organized formally as boards of health, have adopted sanitary regulations and have, on application to the county judge, appointed a sanitary agent and assigned such officer a salary sufficient to enable him to properly perform his duties, such salary to be paid out of the township or district school fund as authorized by law, and no portion of the same to be paid by the State Board of Health. Proof must also be furnished that such salary has been promptly and regularly paid, or written assurance given that it will be so paid.

Reg. 5. In deciding upon applications for aid, the State Board of Health will take into consideration the population and pecuniary

resources of the borough or township applying. No application will be entertained from a borough having a population of more than one thousand or from any rural district smaller than a township.

Reg. 6. In no instance will the State Board assume the entire expense of suppressing the disease in any particular locality. The county and township authorities, namely, the county commissioners, and the directors or overseers of the poor, and, in the case of industrial camps, the proprietors or contractors, must bear their fair proportion of the expense; the object of the law being to aid, not to pauperize local communities.

Reg. 7. The special objects to which the State Board of Health will consider itself authorized to contribute shall be first, the furnishing of vaccine virus; secondly, vaccination; thirdly, wages of quarantine officers or guards; fourthly, the erection or leasing of temporary hospitals; fifthly, the making of inspections; sixthly, performing disinfection; and furnishing disinfectants and apparatus for using the same; and seventhly, remuneration for articles destroyed by order of a board of health.

The local boards of health must be the judges of the ability of parties in quarantine to pay for the necessities of life, and medical and nursing care. Local health officers and sanitary agents must continue to attend to the arrangements for furnishing the necessities of life to those in quarantine.

Reg. 8. The officers to be appointed, as directed by the law, shall be first, a quarantine officer-at-large; secondly, county quarantine officers, one for each county, except Philadelphia; thirdly, deputy quarantine officers, and fourthly, quarantine guards.

The duties and compensation of these several grades of officers shall be as follows:

The quarantine officer-at-large, shall be appointed by the secretary with the advice and consent of the president. His salary shall be ten dollars (\$10.00) per diem and traveling expenses, for which he shall render an itemized account on vouchers. He shall be liable to dismissal by the secretary for due cause. He shall, on instruction by the secretary, visit any section of the State in which small-pox is reported to be present, examine all suspected cases, make diligent inquiry and search for new, unrecognized or concealed cases, determine the diagnosis; appoint, by and with advice of township boards, deputy quarantine officers, quarantine guards and vaccine physicians. So far as may be practicable, he shall act in concert with the county quarantine officer in the discharge of these duties. He shall report daily, if practicable, to the secretary, in writing.

County quarantine officers shall perform the duties now assigned to county medical inspectors, but upon receiving information of the existence of small-pox within the limits of their respective counties,

shall proceed immediately to make a personal inspection without waiting for instructions from the secretary. Their compensation for such occasional duty shall be at the rate of fifteen (\$15.00) per diem and traveling expenses.

County medical inspectors shall be eligible to appointment as county quarantine officers, but shall not be so ex-officio.

Deputy quarantine officers shall perform the duties now assigned to deputy inspectors, and in addition, shall, when so directed, by a superior officer, supervise the quarantine measures control of guards, erection of hospitals, etc., in small districts in which the disease may be prevailing to an unusual extent. For such service they shall be compensated at the rate of five dollars (\$5.00) per diem.

Quarantine guards shall be appointed by local boards subject to the approval of quarantine officers of the State Board. They shall be compensated at the rate of not more than two dollars (\$2.00) per diem so long as their services may be required.

Reg. 9. No unvaccinated person shall be appointed to hold any of the above-named offices.

Reg. 10. The fee for vaccination shall not be more than fifty cents for each successful case.

APPENDIX L.

CIRCULARS AND FORMS.

1. Form No. 43. Vaccination certificate.
2. Form No. 44. Notice to school principals forbidding attendance of children from infected families.
3. Form No. 45. Notice from school principals to health boards regarding prevalence of small-pox.
4. Form No. 47. Notice from employers to health boards of the absence of employe reported to be ill with small-pox.
5. Form No. 49. Vaccination certificate for schools.
6. Form No. 50. Notice of organization of school boards.
7. Form No. 51. Receipt for supplies furnished.
8. Form No. 52. Record of free vaccinations.
9. Form No. 53. Local health officer's report.
10. Form No. 54. Appointment of quarantine guards.
11. Form No. 17-A. Model. Report of communicable disease.
12. Circular Instructions to quarantine guards.
13. Circular, The value of vaccination.
14. Form authorizing directors of poor to take charge of indigent affected with small-pox.
15. Form of petition of school board for appointment of sanitary agent.
16. Circular No.8.Precautions against small-pox.
17. Leaflet No. 1. Sanitary management of small-pox in private dwellings.
18. Leaflet No. 2. Pneumonia.
19. Leaflet No. 3. Typhoid fever
20. Leaflet No. 4. Vaccination creed.
22. Circular, The various types of small-pox.

Notice of Organization of School Boards.
Commonwealth of Pennsylvania.
State Board of Health and Vital Statistics.

....., 19..
To the Secretary of the State Board of Health of Pennsylvania:
Sir: We hereby notify you that the school board of the township
of, county of,
State of Pennsylvania, under the provisions of the act of Assembly
of April 11, 1899, have organized as a board of health by the election
of the following officers:, President;
....., Secretary.
has been appointed sanitary agent and the following rules and regu-
lations has been adopted.



Receipt for Supplies Furnished.
Commonwealth of Pennsylvania.
State Board of Health and Vital Statistics.
Receipt for Supplies Issued by the State Board of Health of Penn-
sylvania.

(Date), 19..
Received of for use in
the borough or township of,
county of,, Pennsylvania, the following
articles.
.....
.....
.....
.....
.....,
Sanitary Agent or Health Officer.

Appointment of Quarantine Guards.**Commonwealth of Pennsylvania.****State Board of Health.**

....., 190..

.....

is hereby appointed quarantined guard for,
 with instructions to prevent the ingress or egress of unauthorized
 persons from the premises under his charge, and on conditions of
 strictly complying with the orders of his superior officer, the laws
 of the State and the regulations of the State Board of Health.

.....,

Quarantine Officer.**Model Report of Communicable Diseases.****Commonwealth of Pennsylvania.****State Board of Health and Vital Statistics.**

**Model Form for Informing Principals and Teachers of Schools of the
 Existence of a Communicable Disease in the House
 of Pupils attending their Schools.**

To the Principal or Teacher in Charge of School:

You are hereby respectfully notified that
 exists in the family of, who is
 a pupil in your school.

In accordance with the act of Assembly of the 18th of June, A. D.
 1895, it is therefore your duty to forbid any child from said family or
 house to attend your school without a certificate from a physician
 or other person designated by this board as having authority to
 issue such certificate, setting forth that the thirty days of absence
 from school subsequent to disinfection of the premises have fully
 expired.

.....,

Secretary of the Board of Health of**On reverse side:****AN ACT**

**To provide for the more effectual protection of the public health in
 the several municipalities of this Commonwealth.**

**Section 14. It shall be the duty of the health authorities in the
 several municipalities as aforesaid, to furnish daily, by mail or other-**

wise, to principals or other persons in charge of said schools, a printed or written bulletin, containing the name, location and disease of all persons suffering from cholera, small-pox (variola or varioloid), scarlet fever, typhus fever, yellow fever, relapsing fever, diphtheria, diphtheritic croup, membranous croup or leprosy, upon receipt by them of reports of such cases from physicians as required in section one of this act: Provided, That the health authorities of any municipality may, in lieu of the daily bulletin herein required, provide that a notice shall be given to the school or schools attended by the children in whose home or residence any of the diseases mentioned in this section exist, and prescribe the form of said notice.

Circular for Quarantine Guards.

Commonwealth of Pennsylvania.

State Board of Health.

Instructions to Quarantine Guards.

The establishment of quarantine over buildings and their occupants is for the purpose of preventing the spread of contagious diseases by preventing all public use of and communication with such buildings and persons.

The position of quarantine guards is therefore one of grave responsibility, as the preservation of the public health may depend largely upon the efficiency with which the duties of the position are discharged.

All quarantine guards, before assuming their duties, must present to the board of health a certificate, either of a recent successful vaccination, or of having had small-pox.

While on duty, the quarantine badge must be worn in a conspicuous place, and under no circumstances shall the badge be delivered to any other person to act as a substitute for a quarantine guard except such as are duly authorized and commissioned by the board of health to perform such duties.

Quarantine guards must not leave their posts of duty until relieved by another guard, and twelve hours shall constitute a daily term of service.

It shall be the duty of quarantine guards to prevent any person who may be within quarantined buildings, from leaving such buildings or exposing themselves in any public manner during the existence of such quarantine; they shall prevent the removal of objects of any description from quarantined building during the period of quarantine; they shall prevent persons who are not under quarantine from approaching quarantined persons or buildings beyond a

reasonable distance, and any person who shall evade a quarantine guard and enter such a building or place themselves in contact with such persons, shall be denied exit from such building so entered and shall be confined for the full period of quarantine or shall be confined in any other building they may subsequently enter after being in contact with quarantined or infected persons.

The medical attendant, health officer or in event of death, the undertaker, shall be excepted provided they shall take proper measures to disinfect their persons and clothing at the time of each visit.

Quarantine guards shall at no time enter the premises under quarantine or come in contact with the inmates of such premises, except by order of the health officer. Communication may be held with quarantined persons by talking at a reasonable distance through an open door or window, or by message in writing which may be read through a closed window.

Quarantine guards will administer to the wants of persons confined in quarantine by transmitting requests for such supplies, as may be made for their maintenance and comfort, and will take charge of the delivery of the same.

Persons who shall attempt to escape or who shall interfere with a quarantine guard in the discharge of his duties, shall be arrested and turned over to the proper authorities for punishment, and communication made of the circumstances to the health board or quarantine officer.

Quarantine guards will carefully observe that the placards on buildings are constantly and conspicuously displayed and promptly renewed when destroyed.

While in the discharge of their duties quarantine guards must use no unnecessary force or violence and must be courteous in their conduct. Profane or indecent language will not be tolerated.

By order of the Board,

BENJAMIN LEE,
Secretary.

March 19, 1903.

Circular on Vaccination.

Commonwealth of Pennsylvania.

State Board of Health.

The Value of Vaccination.

The following is the embodiment of the experience and views of the medical faculty and of sanitarians in reference to this subject:

First. Successful vaccination with genuine virus does, without the slightest question, exert a protective power against small-pox.

57—18—1903

Second. After a successful vaccination there is a period of varying duration in which its protective influence has been proven to be greater than that of a previous attack of small-pox itself.

Third. Following this period of immunity there may be a very slow and gradual diminution of the protective influence which renders subsequent re-vaccination advisable, especially in the presence of an epidemic.

Fourth. This period of partial protection in the vast majority of persons, lasts throughout life.

Fifth. Small-pox, if it occurs in vaccinated persons, takes the form of "Varioloid," the attack being less severe, far less dangerous and of much shorter duration than the disease in unvaccinated persons. The mortality among those who have taken small-pox a second time is five times as great as that from varioloid.

Sixth. Every epidemic of small-pox shows that vaccination not only vastly diminishes the number of cases, but also greatly lowers the mortality among those actually attacked by the disease.

Seventh. Since the introduction of bovine virus produced from the heifer, under the supervision of boards of health, the risk of the introduction of specific diseases of human beings into the system by vaccination, always excessively slight, has been entirely obviated.

Eighth. The exceptional occurrence of an unusually sore arm caused by vaccination simply argues the necessity for care in the propagation and selection of virus, and for cleanliness during and care after the operation, but furnishes not the slightest argument against the universal employment of vaccination as a precaution against the far greater perils of small-pox.

It will be time well spent to consider, for a moment, what those perils were before the introduction of vaccination.

It is an accepted fact that for several hundred years previous to Dr. Jenner's happy discovery one-sixth of all the people in Europe died of small-pox. If we estimate, as there is good ground for doing, that one-fourth of those attacked died, taking mild and severe epidemics together, we shall arrive at the conclusion that two-thirds of the entire population were attacked by it. We are told by Lady Mary Wortley Montague that every third person, met upon the streets of London, was more or less disfigured by its ravages. An old song which has reached us from those days says "From small-pox and love few men remain free." One can scarcely pick up a romance written in the century before the last without finding this dreaded disease figuring in its pages as an every day occurrence. In modern times, on the contrary, a city of a million inhabitants, as, for instance, Philadelphia, may go for a year or several years even, without a death from this cause, and until very recently a pock-marked person was rarely met on our streets. This result

has been achieved by infant vaccination. But long intervals of immunity bring carelessness in this regard, and when the disease occasionally finds a foot-hold, it still discovers ample material to feed upon in the persons of the unprotected, as in Philadelphia and other cities of this State in the years 1871 and 1872, in the city of Reading during the years 1893 and 1894, and in many cities and villages of the State during the past two years. Thousands of lives and millions of dollars were the price paid by Philadelphia for neglect of this precaution.

During the epidemic which prevailed in this State in the years 1899-1900, 1,429 cases were reported. The direct expense to the spoos joj uopuareda supxuu u puu 'aujueuab supuoua u eteas and effects destroyed in the rural districts alone was \$11,637.88. Cities and towns spent fifty times this amount. What the loss to the State has been from interruption of travel and traffic is difficult to estimate. The operation of many coal mines was seriously interrupted. All this loss might have been averted had the entire population been vaccinated. During the present outbreak which began in the year 1891, the State Board of Health being unfortunately out of funds in consequence of the lapsing of the emergency fund, 11,271 cases and 699 deaths have occurred up to the present time.

Scarcely any known disease affecting the general system shows so low a rate of mortality as varioloid. On the other hand, the careful investigations of Dr. Wm. M. Welch, physician to the municipal hospital, of Philadelphia, prove that at the present day, equalizing the results of mild and malignant epidemics, more than one-half of those attacked by true small-pox die. This demonstrates clearly that the disease has lost none of its old-time virulence, although it is true now, as it was two hundred years ago, that in some epidemics a milder type of infection prevails. The verdict of the health officer of Reading, in favor of the protective value of vaccination, is unmistakable and conclusive. Not a single instance occurred during the epidemic referred to according to his report to this Board, in which an individual vaccinated under the direction of the local board of health, and not already infected with small-pox, developed the disease.

On the occasion of the delivery of the annual address before the State Board of Health in the Hall of the House of Representatives, on the evening of February 6, 1901, by Major George G. Groff, U. S. V., that officer stated that when the United States Army first reached Porto Rico small-pox was epidemic throughout the entire island, causing many deaths, yet, when he left the island at the end of his two years' service, having succeeded in vaccinating the entire population of eight hundred thousand souls, not a single case of the disease was known to exist. Certainly no demonstration could be

more complete than this. Similar proof of the value of this measure having been furnished in all European countries, it is not surprising that Germany, France, Italy, Sweden, Hungary, Roumania, and even Japan have made vaccination compulsory.

Form Authorizing Directors of Poor to Take Charge of Indigent Affected with Small-pox.

To
 directors of the poor, in the county of
, State of Pennsylvania,
 Greeting:

Whereas information has been given to the subscribers, two of the justices of the peace in and for the county aforesaid, by, of the township of, that of the said township, has been since the day of, 190..., affected with small-pox, a contagious and infectious disease, and that the said is so poor as to be unable to procure the necessary assistance.

You are hereby authorized and required to take charge of the said and to furnish such medical and other relief as distressed situation may call for.

Given under our hands and seals the day of, A. D. 190..

.....

Form of Petition of School Board for Appointment of Sanitary Agent.

In re petition of School Board of	}	In the Court of Common
..... Township,		Pleas No., of
for the appointment of a Sanitary		County.
Agent.		No., Term, 190..

To the Honorable the Judges of the Court of Common Pleas:

The petition of the school board of township respectfully represents,

That owing to the existence of small-pox, a contagious and infectious disease, within the limits of township, county, Pa., the school board of said township met on the day of, 190..

and under the provisions of the act of April 11, 1899, organized as a health board and adopted rules and regulations for the control and management of contagious diseases, and appointed a sanitary agent to represent the board in the enforcement of these rules and regulations; the compensation of the said sanitary agent has been fixed at \$. per diem, to be paid only when the said sanitary agent is actively employed under the direction of the board, to all of which action they would respectfully petition the court's approval.

.....
President.

.....
Secretary.

State of Pennsylvania, }
County of } ss:

Personally appeared before me the undersigned authority, the above named and who, being duly and severally sworn according to law, depose and say that they are duly elected officers of the school board of township, county, and that they are authorized to make this application, and the statements contained therein are true and correct to the best of their knowledge and belief.

Sworn and subscribed before me this day,
A. D. 190..

CIRCULAR NO. 8. REVISED, 6TH EDITION.

PRECAUTIONS AGAINST SMALL-POX.

The Diagnosis of Small-Pox.

Owing to the great infrequency of small-pox during the past fifty years resulting from the general adoption of vaccination, comparatively few physicians have had an opportunity of becoming familiar with its symptoms. The careful quarantine of the disease by the vigilant health authorities in all our cities still further diminishes the chance of a medical student ever seeing a case. In former days, the family physician was also the preceptor of students and took them with him in his daily round of visits. In this way they were

frequently enabled to study infectious diseases by the bedside. Now all this is changed. Clinical teaching is given only at the general hospitals, and from them such diseases are very properly excluded. Hence, it has come about that on the first appearance of small-pox in a country village, it is almost invariably mistaken for some other less dangerous disease and many persons become infected before its true nature is recognized. This Board, therefore, deems it important to call the attention of physicians to the salient points which distinguish this disease from all others.

In the first place, let it be borne in mind that the mildness or severity of the attacks has little or no value as a diagnostic indication. Because the patient is able to be up and about, even well enough to work or to play, is not sufficient reason to conclude that he is not suffering from small-pox. Nor is the absence of, or failure to perceive, the so-called characteristic odor of small-pox ground for deciding against the presence of that disease. The same may be said of the secondary or suppurative fever.

The disease with which it is most easily confounded during the first few hours of the eruption is measles, and if there has been no small-pox in the neighborhood this mistake may be readily made. The appearance of vesicles or papules, however, will soon clear up this question, and the diagnosis will then be between chicken-pox and small-pox. If the disease be small-pox, on passing the finger over the surface the papules will feel firm and hard under the skin, like small peas or shot, while no such impression will be given in the case of chicken-pox. If it be the latter disease, pressure made with the thumb and finger on either side of the papule in such a way as to stretch the skin tightly over it will almost entirely efface it, while no such effect will be produced in the case of the small-pox papule, owing to the fact that it is formed in the deep layer of the skin.

In both diseases the papules soon begin to form blisters (vesicles) on the summit, and in both these are filled with a clear or cloudy fluid. In the case of chicken-pox, this characteristic is maintained until the vesicles dry up, but in small-pox the fluid rapidly becomes yellowish and opaque, indicating the formation of pus, and we have the true small-pox pustule. The vesicles of chicken-pox develop much more rapidly than those of small-pox. The small-pox pustules are surrounded by a distinct red areola which is not found in chicken-pox. In severe cases of small-pox, the pustules often run together, constituting confluent small-pox. This does not occur in chicken-pox. In small-pox the vesicles all make their appearance at nearly the same time, while in chicken-pox, they come out in successive crops.

Another striking distinction between the vesicle of chicken-pox

and the pustules of small-pox is that on or about the sixth day of the eruption the centre of the small-pox pustules begins to sink in, producing a little cup-shaped depression. This is known to physicians as umbilication, and is a sign of some value. The scab which forms as the pustule of small-pox dries up, is dark colored, firm and strongly adherent, while that of chicken-pox is lighter in color, less compact, and falls off earlier.

Both of the diseases under discussion are self limiting, that is to say, run a definite course and have a definite duration. They are ushered in by chilliness, followed by fever, accompanied by headache, backache, loss of appetite and often vomiting, but in the case of small-pox the eruption does not usually make its appearance until the end of the third or the beginning of the fourth day, while in chicken-pox it appears on the second day of the illness, often within a few hours. In chicken-pox this initial stage is often absent. Whenever large numbers of adults are attacked the disease is certainly small-pox. In small-pox the backache is usually a very prominent feature. The eruption begins as a rule on head and face, often on the upper lip and then spreads to the body and limbs. In small-pox it is more apt to appear abundantly on exposed surfaces, such as the face and hands, while in chicken-pox it prefers surfaces covered by the clothing. The marks of small-pox, aside from pitting, persist for many weeks, usually producing a brown pigmentation of the skin. The development of pustules on the palms of the hands, the soles of the feet, the ball of the eye and the inside of the mouth are all strong evidence of the presence of small-pox.

With the development of the eruption, all of the feverish symptoms disappear and in mild cases do not return.

A third disease, however, for which small-pox has recently been mistaken in this States does not present a self-limited and definite course. I refer to the superficial cutaneous affection known as *impetigo contagiosa*. In this disease, if there be an initial fever, it is usually so slight as to escape notice. A child will go to bed at night feeling well as usual, and may wake in the morning with reddish spots on the skin, which soon become blisters, or blebs. These, instead of being round and prominent, like those of small-pox, are usually flat, irregular in shape and of variable size, and they tend to run together, forming crusted patches. As they dry in the centre, they continue moist at the edge and in this way spread, and may last for several weeks. The crust which they form is yellow, bulky, superficial and easily detached, seeming as if stuck on. This disease, parasitic in its nature, is more apt to be confounded with chicken-pox than with small-pox. It often attacks several members of a family one after another.

Precautions Against Small-pox.

Small-pox (variola), and varioloid are one and the same disease, caused by the same contagium. Varioloid is less severe and rarely fatal, because the system of the patient has been modified by vaccination, but it is just as capable of communicating itself, of being "caught" or "taken" as small-pox, and may communicate the disease in its most virulent form. It demands, therefore, exactly the same

Preventive Precautions.

Vaccination is, of course, the one and only preventive. Fortunately, the people of this Commonwealth are so generally well informed and intelligent, that there is no reason to apprehend a reproduction of the disgraceful scenes of riot and bloodshed, which have in late years been enacted in other countries, in the ignorant attempt to thwart the efforts of the health authorities to check the spread of this pestilence. But carelessness and neglect may reap as baneful a harvest as criminal opposition. Convinced of this, the Board at its very first meeting, passed a resolution instructing the Secretary to prepare a circular, warning the people of this State of the prime necessity of vaccination. Next to the rising of the sun, nothing is more absolutely certain than the fact that successful vaccination, with reliable lymph, repeated with sufficient frequency, is a sure preventive against small-pox. And the fact next in order of positiveness is that careful vaccination with pure lymph will convey to a person susceptible of small-pox, the vaccine disease or cow-pox, and no other disease. Hence, First, it is important that vaccination should be performed by an educated physician, in order to be assured that strict cleanliness is observed both in operating and in the care of the sore, that the lymph used is pure and reliable, especially if taken from a human being (humanized lymph), and that the vaccination has thoroughly taken. Secondly, If bovine (heifer) lymph is preferred, it should be obtained from an entirely reliable source, in order that it may be, first, free from all impurities, and, secondly, active and effective. No antiseptic should be applied to the skin or to the sore, as this would destroy the vitality of the virus.

Precautions in Regard to Infants.

Every infant should be vaccinated within three months after its birth, unless an educated physician advises to the contrary. Should the first attempt fail, it should be repeated at intervals of a fortnight, until a true sore is produced.

Precautions in Regard to Children.

Every child should be re-vaccinated before it reaches its twelfth year.

No child should be allowed to enter any school, public or private, without the certificate of a physician that said child has either been successfully vaccinated or has had small-pox.

The following

Rules

Are recommended for adoption by all public school boards and trustees:

I. Every child entering the public schools of must give satisfactory evidence of protection against small-pox, or be excluded until the Rule is complied with.

II. The fact of vaccination and protection shall be entered with each name on the school record and on transfer or promotion lists.

III. Intercourse between the school and a family or house where there is a case of small-pox must be forbidden until official permission is given.

IV. Every school teacher or school officer who discovers a case of this disease among the attendants on the school must report the fact immediately to the local board of health, or if there be no local board to the State Board of Health.

V. All school books, furnished at the public expense, which have been exposed to the infection of small-pox must be destroyed by fire.

Boards deciding to exercise this power should pass a resolution to that effect, and post a notice for at least ten days, in two or more conspicuous places, within the limits of their respective school board or district organizations. Such notice should offer free vaccination to all who are unable to pay. The power of school boards in country districts as well as in boroughs and cities to enforce vaccination of pupils has been sustained by the courts in this State.

Precautions in Regard to Adults.

Every adult should be re-vaccinated at least once in twelve years.

Precaution in the Immediate Presence of an Epidemic.

The State Board of Health recommends that in whatever city, village or town small-pox appears, the entire neighborhood in which there has been any communication with the patient, or exposure to the contagion, shall be notified that the State Board of Health requires that every person shall be protected by vaccination; that tramps and other persons suspected of infection with

small-pox shall be taken in charge by the police and sanitary authorities; that employers shall advise their companies of employed persons to be vaccinated, and in case of small-pox in their vicinity, shall make such vaccination one of the conditions of being continued in employment. This rule should be strictly enforced in all manufactories that make goods which are liable to become infected, and especially should be a standing regulation in textile mills, in paper mills, in public houses and among all classes employed on railroad trains and passenger vessels.

Form of Report to the State Board of Health or the Local Board.

(Name and age)

..... is sick with small-pox or
(Name of house and place)

(varioid) at The eruption began
(Date)

.....
It is believed that the contagion was taken at
by exposure to

Number of patients now exposed to patient

(Signed)

(P. O. address)

Request:

(Vaccination, placarding, food, medicine, physician or nurse)...

Strike out subjects not needed.

Such a notice, with the request that needs to be made, should be sent to the health officer or the nearest member of the local board of health. If a physician is already in attendance, he should sign it; but if no physician has reached the patient, the householder, and any other person who has charge of the case should sign the first report and request, and send it to the family physician or to the health officer. The physician who first sees the case, or the health officer, should write out such a brief report and his own request, and send it by mail to the Secretary of the State Board of Health.

The Board further recommends that the municipal authorities shall immediately provide such hospital or place of reception for the sick and infected as is judged best for their accommodation and the safety of the inhabitants, which shall be subject to the regulations of the said authorities, who may cause any sick and infected persons to be removed thereto, unless the condition of such person will not admit of his removal without danger of his life, in which case the house or place where he remains shall be considered as a hospital, all persons residing in or any way concerned within the same

shall be subject to the regulations adopted for the hospital. They shall use all care to prevent the spreading of the infection, and shall give public notice of infected places by displaying yellow flags or printed placards at proper distances, by supervising public conveyances, and by all other means which in their judgment shall be most effectual for the common safety. And whoever obstructs the said authorities, or their agent, in using such means to prevent the spread of the infection, or wilfully removes, obliterates, defaces or handles the yellow flags or other signals so displayed, shall, upon conviction, forfeit, for each offence, a sum of not less than five nor more than one hundred dollars at the discretion of the court, and, in default of payment thereof, shall undergo an imprisonment in the county jail for a period not exceeding sixty days.

Precaution in the Family.

Every member of the family in which a case occurs should be vaccinated afresh.

Precautions in the Sick Room.

I. The patient should be placed in one of the upper rooms of the house, the farthest removed from the rest of the family, where is to be had the most complete ventilation and isolation. The room should be instantly cleared of all curtains, carpets, woolen goods, and all unnecessary furniture. The rooms should be kept constantly well ventilated, by means of open windows, and of fires, if necessary. The utmost cleanliness should be observed both with regard to the patient and the room.

II. A basin containing chloride of lime or quick lime in solution, or some other convenient disinfectant, should be kept constantly on the bed for the patient to spit in. Change the clothing of the patient as often as needful, but do not carry it while dry through the house. A large vessel (a tub) containing a disinfectant solution should always stand in the room, for the reception of all bed and body linens immediately on removal from the person or contact with the patient. Pocket handkerchiefs should not be used, but small pieces of rag should be employed instead for wiping the mouth and nose; and each piece after being once used should be immediately burned. Two basins, one containing water impregnated with a disinfectant solution, and the other containing plain water, and a good supply of towels, must always be ready and convenient, so that the hands of the nurse may be at once washed after they have been soiled by contact with the patient. All glasses, cups and other vessels used by or about the patient should be scrupulously cleansed before being used by others. The discharges from the bowels and

kidneys are to be received on their very issue from the body, into vessels containing a disinfectant, and immediately removed.

III. No person should be allowed to enter the room except those who are attending upon the sick. A sheet moistened with a strong disinfectant solution and suspended outside the door of the room or across the passage-way leading to it, is necessary to complete the isolation of the patient.

IV. Boiling is the surest way of disinfecting all contaminated clothing. A disinfectant should first be added to the water. Any material which cannot be washed without injury, should be exposed to a dry heat of about 240 degrees Fahr., or fumigated in a closed chamber, as directed below. A hot-air disinfecting chamber should be provided, near all cities, where beds, woolen goods, etc., may be disinfected under the direction of officers appointed by the Board of Health. All articles which can possibly be spared should be destroyed by fire.

V. Small-pox is most contagious during convalescence; therefore, strictly observe that the patient does not mingle with the family until the scabs are entirely off, and only after a thorough purification by bathing, with a disinfectant in the water, and entire change of clothing.

VI. In case of death, wrap the corpse in a sheet saturated with the strongest disinfecting solution, without previous washing; if the means are at hand inject the cavities of the chest and abdomen with a solution of chloride of zinc or other antiseptic fluid; and bury it in a deep grave, within twenty hours, and without a public funeral.

Standard Disinfecting Solutions Recommended by the Board of Health.

1. Standard Solution No. 1.—Dissolve chloride of lime or bleaching powder of the best quality (containing at least twenty-five per cent. of available chlorine) in soft water in the proportion of six ounces to the gallon.

(NOTE.—1. This solution is highly poisonous. 2. It requires a contact of one hour to be efficient. 3. It destroys lead pipes. 4. It is without odor.)

2. Standard Solution No. 2.—Dissolve corrosive sublimate and permanganate of potash in soft water in the proportion of two drachms of each salt to the gallon.

3. Standard Solution No. 3.—To one pint of Labarraque's Solution of hypochlorite of soda (liquor sodæ cloratæ.—U. S. P.), add five parts of soft water.

Standard Solution No. 4.—Dissolve corrosive sublimate in or in the proportion of four ounces to the gallon, and add one of permanganate of potash to give color to the solution

as a precaution against poisoning. One fluid ounce of this solution to the gallon of water is sufficiently strong. Articles should be left in it for two hours.

(NOTE.—Corrosive sublimate solutions should be kept in wooden or crockery vessels.)

To Disinfect Discharge from the Patient.

Use standard solutions Nos. 1, 2 or 3, keeping a pint of the solution used constantly in vessel ready for any emergency. Let the discharges be passed directly into the solution, and then let a pint of it be added and allow the whole to stand for some time before being thrown into the sewer, or being buried. Milk of lime, ordinary white-wash, is also a very good disinfectant for this purpose.

To Disinfect Clothing, Towels, Napkins, Bedding and such Textile Fabrics as Can be Washed.

Use standard solution, No. 4, one ounce to the gallon of water, or use one gallon of solution No. 1, in nine gallons of water. Let the goods soak in the solution for at least three hours—better four hours, before they leave the room. Stir them up so that the solution may get all through them. After disinfection, boil the goods thoroughly.

For the Disinfection of Water-Closets, Urinals, Sinks and Cesspools.

5. Carbolic Acid Solution.—Mix one pint of carbolic acid with two and a half gallons of water.

Standard solution No. 4, diluted with three parts of water may also be used in the proportion of one gallon (of the solution) to every four (estimated) of the contents of the vault. Standard solution No. 1 would require to be used gallon for gallon of the material to be disinfected. Dry chloride of lime may be sprinkled over the contents of a privy, or standard solution No. 2 may be made up by the barrel, and four or five gallons be applied daily during the epidemic.

To Disinfect the Sick Room After it is Vacated.

Let the room be thrown wide open for several days, for a thorough airing. If papered, let the paper be all removed with care. Then let all the walls, the floors and the woodwork of the room, as well as the furniture, be washed with standard solution No. 4, one pint to four gallons of water, or, of solution No. 1, a quarter of a pint to a gallon of water. Let this work be done most carefully, getting the solution into all the crevices. If any dust be present in the corners and crevices, wipe it out with a rag wet in the disinfecting fluid. Don't stir it up with a brush or broom. Last of all, whitewash the walls and the ceiling.

Sulphur Fumigation.

Is believed in by many as very efficacious, but should not be allowed to take the place of the scraping and the rubbing. It is performed in the following manner: Open wide all the drawers and closet doors. Hang on lines, opened up as much as possible, all the woolen articles which have been in the room during the sickness and which have not been disinfected and washed, then burn two pounds of sulphur for every thousand cubic feet of space in the room. Every opening in the room—flues, doors, windows, cracks and crevices—must be closed, except the door by which the disinfector is to escape. The sulphur is to be burned in an iron kettle or other vessel set in a tub, containing a little water, to guard against fire. A little alcohol or kerosene must be poured upon the sulphur by means of which it may be ignited. A small quantity of water evaporated at the same time will add to the efficiency of the fumes. Leave the room quickly, for the fumes are highly poisonous when breathed, and close the door tightly. Let the room remain closed twenty-four hours or more. Then air thoroughly for several days.

Formaldehyde (Formalin).

This comparatively new substance promises to supersede sulphur as an aerial or gaseous disinfectant. Not only does it appear to be more penetrating and more destructive to germ life, but it possesses the very great advantage of not injuring the colors of fabrics, or wall papers, or tarnishing and corroding metallic surfaces. It is also known as formic aldehyde, and is a gas developed by the action of a red-hot surface of platinum on the vapor of wood alcohol or wood spirit (methyl-alcohol). A saturated (40 per cent.) solution of this gas in water is sold under the name of formalin.

The gas may be generated directly in the apartment to be disinfected, the same precautions being taken as regards stopping up crevices as in using sulphur fumes. Formalin may be mixed with water in the proportion of two parts to the hundred and applied, with a sprayer directly to surfaces to be treated, or may be forced undiluted into the closed apartments through a key hole or other orifice, or in the form of vapor or atomized fluid.

Another mode of application is to dilute formalin with an equal quantity of water, and evaporate it in wide pans by gentle heat. For every 1,000 cubic feet of air space, a pint of this mixture is required; or it may be evaporated from sheets moistened with a mixture of one part formalin to two of water and hung up in the room. For this method, three pints of the mixture should be evaporated for every 1,000 cubic feet of air space.

The temperature of the room should not be allowed to fall below 60 degrees F.

There is testimony of convincing character both from scientific experiments and practical health officers as to the efficiency of all these modes of application.

THE LAW FOR THE PREVENTION AND RESTRICTION OF SMALL-POX.

AN ACT

To provide for the more effectual protection of the public health in the several municipalities of this Commonwealth.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That every physician located or practicing in any of the municipalities of this Commonwealth, who shall know that any person whom she or he is called upon to visit, or who comes or is brought to him or her for examination, is suffering from, or is afflicted with small-pox (variola or varioloid), shall forthwith make report in writing, or upon blanks to be furnished for that purpose, to the health authorities of the municipality in which said person may be located, which said report shall, over his or her own signature, state the name of the disease and the name, age and sex of the person suffering therefrom, and shall also set forth by street and number, or otherwise sufficiently designate the house, room or other place in which said person may be located, together with such other information relating thereto as may be deemed important by said health authorities.

Physicians must report small-pox to health authorities.

Contents of report.

Section 2. Upon receipt by the health authorities of a report of the existence of a case of small-pox (variola or varioloid), in any of said municipalities, they may at once place, or cause to be placed, in a conspicuous place or places upon or near

Placards to be placed on or near house.

Variola and varioloid to be placarded as small-pox.

How long placards shall remain on house.

Guards may be placed upon house.

Head of family shall be responsible if placard is destroyed.

Duties of undertaker in case of death.

When body must be placed in coffin.

Coffin must be closed tightly.

Health authorities may adopt more stringent rules.

or premises in which said case may be located, a placard or placards upon which shall be printed in large letters the name of the disease: Provided, That variola or varioloid shall be placarded as "small-pox," and said placard or placards shall remain thereon, until such time as the rules and regulations established by the health authorities regarding the destruction or disinfection of infected bedding, clothing or other articles which have been exposed to infection, and the disinfection of houses and premises have been fully complied with: Provided, That in addition to the placarding aforesaid, or in lieu of the same, the said health authorities may place a guard or guards upon said house or premises.

Section 3. The head of the family occupying any house or premises upon or near which said placard or placards aforesaid may be placed, shall be liable for the fine and penalty provided by this act in any case where such placard or placards are removed, defaced, covered up, taken down or destroyed, with his or her knowledge or consent before the time provided by section two of this act.

Section 4. In the care and burial of the bodies of persons who have died of small-pox, in any of the municipalities of this Commonwealth, it shall be the duty of the undertaker or other person or persons having the body in charge, to thoroughly disinfect and place every such body within the coffin or casket in which it is to be buried within six hours after first being called upon to take charge of the same: Provided, Said call is made between the hours of five ante meridian and eleven post meridian; otherwise such body shall be placed in such coffin or casket within twelve hours, the coffin or casket then to be closed tightly, and not again opened, unless permission be granted by the health authorities for special and satisfactory cause shown: Provided, That the health authorities in any municipality may adopt more stringent rules and regulations than are herein provided for the disinfection, preparation and burial of the bodies of persons who have died of small-pox, which rules and regulations they may from time to time alter or amend.

Section 5. The body of a person who has died of small-pox shall not remain unburied for a longer period of time than thirty-six hours after death, unless special permission be granted by the health authorities extending the time during which said body may remain unburied for special and satisfactory cause shown. The head of the family and the person or persons having charge of the funeral of such body shall be responsible for any violation of the provisions of this section.

Body must be buried within thirty-six hours, unless time is extended by special permission.

Responsibility for violation of this section.

Funeral services must be private.

Section 6. All services held in connection with the funeral of the body of a person who has died of small-pox must be private, and the attendance thereat shall include only the immediate adult relatives of the deceased and the necessary number of adult pall-bearers, and any advertisement of such funeral shall state the cause of death. The head of the family and the person or persons having charge of said funeral services shall be responsible for any violation of the provisions of this section.

Advertisement of funeral must state cause of death.

Violation of this section.

Section 7. The body of a person who has died of small-pox shall in no instance be taken into any church, chapel, public hall or public building for the holding of funeral services. The head of the family, and the person or persons having charge of said funeral services, and the sexton, janitor, or other person or persons having charge or control of such church, chapel, public hall or public building, shall be responsible for any violation of the provisions of this section.

Body shall not be taken into any church or public building.

Violation of this section.

Section 8. No undertaker, or other person or persons having charge of the funeral or burial of the body of a person who has died of small-pox shall in any case furnish or provide for such funeral more than the necessary number of conveyances for said adult relatives and pall-bearers, and all such conveyances which may have been used or occupied by any person or persons who have been residing in the same family or house with the deceased, shall be fumigated and disinfected at such time and in such manner as may be directed and required by the health authorities.

Conveyances for
use of relatives
and pall-bearer.

Conveyances shall be fumigated and disinfected.

Section 9. The body of a person who has died of small-pox shall not be carried to or from any dwelling, or other building, or any place of burying, or

Body must be conveyed in a hearse.

Violation of this section.

Bedding, clothing, etc., to be disinfected or destroyed after recovery or removal of patient.

Violation of this section.

Children not allowed to attend schools.

Shall be excluded for thirty days after recovery of person last afflicted in house.

Must have certificate from medical attendant.

Proviso.

other point except in a hearse or other vehicle used for the purpose of conveying corpses only, or in such vehicle as shall be satisfactory to the health authorities, and under such regulations as they may in any case adopt. The undertaker and the person or persons having charge of the funeral or transportation of such body, shall be responsible for any violation of the provisions of this section.

Section 10. Upon the removal to hospital or other place, or upon the discharge by recovery or death, of any person or persons who have suffered from small-pox, the premises where the said disease existed shall be fumigated and disinfected, and the bedding, clothing and other infected articles destroyed, or disinfected, at such time and in such manner as may be authorized and required by the health authorities. The head of the family or the person or persons having charge of the premises shall be responsible for any violation of the provisions of this section.

Section 11. No child or other person belonging to or residing in the same house in which any person may be located who is suffering from small-pox (variola or varioloid), shall be permitted to attend any public, private, parochial, Sunday or other school in said municipalities, and all school principals, Sunday school superintendents or other persons in charge of such schools, are hereby required to exclude any and all such children and persons from said schools, such exclusion to continue for a period of thirty days following the discharge by recovery or death of the person last afflicted in said house or family, or his or her removal to hospital, and the thorough disinfection of the premises, and all such children or other persons as aforesaid, before being permitted to attend or return to school, shall furnish to said principal or other person in charge of said schools a certificate signed by the medical attendant of said children or persons, or by a physician to be designated by the health authorities of said municipalities, setting forth that the thirty days mentioned in this section have fully expired: Provided, however, That the health authorities may by rule or regulation provide that such certificate shall only be given by a person to be designated by said authorities, and in such case no other certificate shall be recognized.

Section 12. All principals or other persons in charge of schools as aforesaid are hereby required to refuse the admission of any child to the schools under their charge or supervision, except upon a certificate signed by a physician, setting forth that such child has been successfully vaccinated, or that it has previously had small-pox.

Principals of schools must refuse admission of children except on certificate showing that that child has been vaccinated or has had small-pox

Section 13. The health authorities of said municipalities shall furnish to principals or other persons in charge of said schools, and to physicians the necessary certificates or blanks for the uses and purposes as set forth and required in sections one, eleven and twelve of this act. The registry of said schools shall exhibit the names and residences of all children or persons admitted or rejected for reasons set forth in this act, and said registry shall be open at all times to the inspection of the health authorities.

Blanks shall be furnished principals of schools.

School registry of all children admitted or rejected under provisions of this act

Section 14. It shall be the duty of the health authorities in the several municipalities as aforesaid to furnish daily, by mail or otherwise, to principals or other persons in charge of said schools, a printed or written bulletin, containing the name, location and disease of all persons suffering from small-pox (variola or varioloid), upon receipt by them of reports of such cases from physicians as required in section one of this act: Provided, That the health authorities of any municipality may, in lieu of the daily bulletin herein required, provide that a notice shall be given to the school or schools attended by the children in whose home or residence any of the diseases mentioned in this section exist, and prescribe the form of said notice.

Health authorities shall furnish daily reports to schools.

Contents of reports.

Proviso.

Section 15. No person suffering from small-pox, nor any one who has charge of a person so suffering, shall enter any hired vehicle or other public conveyance, or permit any one who is in his or her charge who is so suffering to enter such vehicle without previously notifying the owner or driver thereof that he or the person in his charge is so suffering, and the owner or driver of such vehicle shall immediately provide for the disinfection of such conveyance after it has, with the knowledge of such owner or driver, conveyed any such suffered, under the direction of the health authorities.

Person suffering from small-pox or his attendant shall not enter carriage or public conveyance without notifying owner or driver.

Disinfection of such conveyance

Exposure of person suffering from small-pox.

Section 16. No person suffering from small-pox shall wilfully expose himself or herself in any street, or public place, or public conveyance, nor shall any person in charge of one so suffering thus expose the sufferer.

Use of bedding, etc., exposed to infection.

Section 17. No person shall, without previous disinfection, give, lend, sell, transmit or expose any bedding, clothing, rags or other articles which have been exposed to infection: Provided, That such restriction shall not apply to the transmission of articles, with proper precautions, for the purpose of having the same disinfected.

Room or house shall not be let until same is entirely disinfected.

Section 18. No person shall knowingly let any room, house or part of a house, in which there has been a person suffering from small-pox, without having such room, house or part of a house, and all articles therein liable to infection, previously disinfected to the satisfaction of the health authorities. The keeping of a hotel, boarding house or apartment house shall be deemed as letting a part of a house to any person who shall be admitted as a guest into such hotel, boarding house or apartment house.

Guest at hotel, boarding house or apartment house.

Rules and regulations shall be established by health authorities.

Section 19. The health authorities of the several municipalities of this Commonwealth shall and they are hereby authorized and empowered to establish rules and regulations regarding the isolation of persons who may be suffering from small-pox, and for the destruction, disinfection and fumigation of bedding, clothing or other infected articles, and for the disinfection and fumigation of houses and premises, and for the carrying out of the provisions of this act, as they may in good faith declare the public safety and health demand, which rules and regulations they may from time to time alter or amend.

Penalty for violation of any of the provisions of this act.

Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton, janitor, head of a family or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate any of the provisions or requirements of this act, shall, for every such offense, upon conviction thereof, before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offense was committed, be liable to a fine or penalty therefor of not less than five dollars, or more than one

Fines to be paid into treasury of municipality.

hundred dollars, which said fines or penalties shall be paid into the treasury of said municipality, and in default of payment thereof, such person or persons so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days. Imprisonment.

Approved—The 18th day of June, A. D. 1895.

DANIEL H. HASTINGS.

Note.—The constitutionality of the above act has been affirmed by His Honor, Judge Morrison, in the case of *W. F. Sprague vs. J. E. Baldwin* and others, school directors and teachers of the school district of Otto township, and by His Honor Judge McPherson, in the case of *Martin F. Nissley vs. Charles Hollet et al.*, directors of the school district of Hummelstown borough.

With regard to the doubt existing in the minds of many school directors in rural districts outside of cities and boroughs as to their authority and responsibility with regard to the enforcement of this law, that question was decided by His Honor Judge Morrison in *re W. F. Sprague vs. J. E. Baldwin* and others, school directors and teachers of the school district of Otto township. His decision, in brief was that the act of June 18, 1895, relating to the vaccination of children in public schools, applies to township school districts and is not limited to cities and boroughs, a township being, in the eyes of the law, a municipal corporation. This was evidently the opinion of the Legislature in passing the law. This decision further states with regard to the question of the suggested incompatibility of this act with the act of May 16, 1895, relating to compulsory education, that "statutes enacted at the same session of the Legislature are within the reason of the rule governing the construction of statutes in *pari materia*, and should, if possible, receive a construction which will give effect to each." The act of June 18, 1895, relating to vaccination, and the act of May 16, 1895, relating to compulsory education should be construed so that both may stand. In the course of this decision His Honor uses the following language:

"It cannot be doubted that the legislative intent was to include both townships and school districts in this act.

"So we cannot escape the conclusion that the title of the act of June 18, 1895, is broad enough to cover legislation for all of the municipal sub-divisions of the Commonwealth, down to and including townships and school districts. Surely, the legislative intent was to protect the public health from contagion, epidemics,

public funerals of cholera, small-pox and scarlet fever victims, and for the courts to hold that the legislative intent was to limit this important legislation to cities and boroughs, and to leave these diseases to run riot in the townships would be to convict the Legislature of doing a ridiculous thing. It is probable that one-half of the population of the State is outside of the cities and boroughs, and, therefore, in the townships.

"How absurd to say that the legislative intent was to protect the citizens of the cities and boroughs and leave those of the townships to be exposed without protection."

Quite independently of this law, however, school boards have authority to make vaccination a pre-requisite to the attendance of a child on a public school. Justice Woodward, in delivering the opinion of the Supreme Court in the case of Wharton et al. vs. School Directors, 42 Pa. Statutes, 363, says: "School boards belong to that class of quasi corporations to which counties and townships belong, exercising within a prescribed sphere many of the faculties of the corporation, and the directors are invested with various discretionary powers in the execution of the school laws for which they are responsible only to the people whose representatives they are."

Judge Metzger, in the case of A. J. Duffield vs. the School Board of Williamsport, Common Pleas Court, Lycoming county, No. 503, March term, 1894, says: "It is clearly the right as well as the duty of the board of school directors in case of imminent danger of the spread of contagious diseases to do everything in their power that may be necessary to prevent such disease from being carried and transmitted to the pupils of the school by those infected with it, and those who, by reason of their contact with infected persons, are likely to inoculate others with whom they are allowed to mingle. This power, if it exists, could not be advantageously exercised in any other way than by the exclusion from the school of the parties who are likely to spread the disease among the pupils. If the board of school directors had in no such case such power they would be powerless to preserve the existence of the schools during the period when contagious diseases were abroad in the neighborhood."

The same decision asserts the right of councils to pass an ordinance ordering that no pupil shall be permitted to attend school without a certificate of vaccination.

AN ACT

Extending the powers of the State Board of Health, for the purpose of enabling it to meet the emergency occasioned by the epidemic of small-pox now prevailing in the various parts of this Commonwealth; providing a penalty for the violation of the rules and regulations prescribed by the said Board of Health, and making an appropriation for the purpose of carrying this act into effect.

Whereas an epidemic of small-pox has prevailed for several months past in various parts of this Commonwealth, and is threatening other localities by reason of the inability of the local authorities under the present laws to properly cope therewith, therefore:

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That the State Board of Health is hereby authorized and empowered to quarantine any building or buildings in which small-pox may at any time exist in any place where a local board of health does not exist, or in any communities in which small-pox exists in such epidemic form as to be in the judgment of the State Board of Health dangerous to other communities, and to adopt such rules and regulations as they deem necessary for the purpose of carrying this act into effect, and may appoint officers, to be known as quarantine officers, who shall have all the powers of constables for the purpose of enforcing said rules and regulations.

Section 2. Wherever local boards of health exist, the State Board of Health is hereby authorized and empowered to adopt such rules and regulations as it may deem necessary for the purpose of carrying this act into effect, and in case of the failure or refusal of the local boards of health to observe or obey said rules and regulations no part of the appropriation hereby made shall be expended in such communities.

Section 3. Any person not a physician, nurse or other duly authorized attendant or visitor, lay, professional or clerical to any quarantined building or buildings, who in the presence of any member of the State Board of Health, or of the local boards, or in the presence of any quarantine officer has broken quarantine regulations or successfully induced others to break quarantine regulations by coming out or by entering into and coming out of any quarantined building or buildings and mingling with other people, or going to places where people congregate, or are likely to congregate, either hall, house, shop, store, farm, post-office, church, street, highway or road, or who sends messengers, express or post, packages, parcels, goods or supplies which have not been previously

marked "permitted," by the physician in charge from any quarantined building or buildings to any point outside of said building or buildings or who tears down or displaces any sign, placard, poster or notice placed on any quarantined building or buildings by order of the board of health may be arrested forthwith without warrant by any of the members of the State Board of Health, or of the local boards of health or by any of the quarantine officers appointed by the State Board of Health under the authority herein given, and any person not a physician, nurse or other duly authorized attendant or visitor, lay, professional or clerical to any quarantined building or buildings, who upon credible information communicated either to any member of the State Board of Health or of the local boards or to any quarantine officer is charged with breaking quarantine regulations or successfully inducing others to break quarantine regulations by coming out of or by entering into and coming out of any quarantined building or buildings and mingling with other people or going to places where people congregate, either hall, house, shop, store, farm, post-office, church, street, highway or road, or by sending by messenger, express or post, packages, parcels, goods or supplies which have not been previously marked "permitted," by the physician in charge from any quarantined building or buildings to any point outside of said building or buildings, or who is charged with tearing down or displacing any sign, placard, poster or notice placed on any quarantined building by order of the board of health may be arrested upon warrant by any of the members of the State Board of Health or of the local boards of health or any of the said quarantine officers or any other constable, police officer of this Commonwealth, and such person so offending, whether arrested with or without warrant as above provided, shall be deemed guilty of a misdemeanor, and upon conviction in the court of quarter sessions for the proper county of any of the acts hereinbefore stated shall be sentenced to pay a fine not exceeding one thousand dollars and undergo an imprisonment not exceeding one year, either or both at the discretion of the court.

Section 4. That the sum of fifty thousand dollars be, and the same is hereby specifically appropriated out of any money in the treasury not otherwise appropriated to the State Board of Health for the purpose of assisting the people of the communities in which small-pox now exists or may hereafter exist in stamping out said disease and in carrying out the purposes of this law.

Section 5. This act shall continue in force for the period of two years from the date of its passage and no longer.

Approved—The 26th day of March, A. D. 1903.

SAMUEL W. PENNYPACKER.

INSTRUCTIONS FOR QUARANTINE GUARDS.

The establishment of quarantine over buildings and their occupants is for the purpose of preventing the spread of contagious diseases by preventing all public use of and communication with such buildings and persons.

The position of quarantine guards is, therefore, one of grave responsibility, as the preservation of the public health may depend largely upon the efficiency with which the duties of the position are discharged.

All quarantined guards, before assuming their duties must present to the board of health a certificate, either of a recent successful vaccination, or of having had small-pox.

While on duty, the quarantine badge must be worn in a conspicuous place, and under no circumstances shall the badge be delivered to any other person to act as a substitute for a quarantine guard, except such as are duly authorized and commissioned by the board of health to perform such duties.

Quarantine guards must not leave their posts of duty until relieved by another guard, and twelve hours shall constitute a daily term of service.

It shall be the duty of the quarantine guards to prevent any person who may be within quarantined buildings, from leaving such buildings or exposing themselves in any public manner during the existence of such quarantine; they shall prevent the removal of objects of any description from quarantined buildings during the period of quarantine; they shall prevent persons who are not under quarantine from approaching quarantined persons or buildings beyond a reasonable distance, and any person who shall evade a quarantine guard and enter such a building or place themselves in contact with such person, shall be denied exit from such building so entered and shall be confined in any other building they may subsequently enter after being in contact with quarantined or infected persons.

Precautionary and Hygienic Circulars Issued by the State Board of Health of Pennsylvania.

No. 7. Precautions against Cholera, Cholera Infantum, Cholera Morbus, Summer Diarrhoea and Dysentery.

No. 7. Precautions against Cholera, etc. (German.)

No. 7. Precautions against Cholera, etc. (Slovak.)

No. 7. Precautions against Cholera, etc. (Italian.)

No. 8. Precautions against Small-pox.

- No. 18. Precautions against Typhoid Fever.
- No. 19. Precautions against Diphtheria.
- No. 20. Contagious and Infectious Diseases.
- No. 20. Contagious and Infectious Diseases. (German.)
- No. 20. Contagious and Infectious Diseases. (Slovak.)
- No. 20. Contagious and Infectious Diseases. (Italian.)
- No. 21. Precautions against Scarlet Fever.
- No. 22. Precautions against Trichinosis.
- No. 22. Precautions against Trichinosis. (German.)
- No. 24. Recommendations in regard to the care of Infants.
- No. 25. (Revised.) The "Act for the better protection of the health and morals of school children," with a description of a cheap and convenient earth closet.
- No. 26. School Hygiene, addressed to Teachers.
- No. 27. Camp Hygiene.
- No. 28. Precautions against Consumption.
- No. 29. The dangers arising from public funerals of those who have died from Contagious and Infectious Diseases. Addressed to the Clerical Profession.
- No. 30. The disposal of the Sewage of Public Edifices. Addressed to the Trustees and Managers of Public Institutions.
- No. 31. Precautions to be adopted by Funeral Directors to prevent the Spread of Contagious and Infectious Diseases.
- No. 32. Precautions against Sunstroke.
- No. 33. School Hygiene, No. 2. Addressed to School Directors and Trustees.
- No. 34. First Treatment of the apparently Drowned and Suffocated.
- No. 35. The Prevention of Blindness.
- No. 36. Sanitary Protective Associations.
- No. 37. Emergency Hospitals.
- No. 38. The Care of the Eyes.
- No. 39. Dairy Hygiene.
- No. 40. The Law Establishing Boards of Health in Boroughs.
- No. 41. Personal Precautions recommended to be taken by Physicians in attending those suffering from certain Communicable Diseases.
- No. 42. How to meet Cholera. Addressed to Boards of Health.
- No. 43. Model Regulations for the Storage and Removal of Garbage.
- No. 44. Model Rules of Boards of Health.
- No. 45. Powers and Possibilities of Boards of Health.
- No. 46. The Sanitary Code of Pennsylvania for the Restriction of Communicable Diseases.
- No. 47. Precautions against Whooping Cough.

- No. 48. Precautions against Measles.
- No. 49. Suggestions with regard to Railroad Hygiene and the Prevention of Accidents.
- No. 50. School Hygiene, No. 5. On the Teaching of Hygiene in the Public Schools. Addressed to Superintendents and Principals.
- No. 51. Precautions against Yellow Fever.
- No. 52. Hygienic Hints for Barbers and Hair Dressers.
- No. 53. Precautions Against the Plague.
- No. 54. Model Regulations for School Boards Acting as Boards of Health.
- No. 55. Regulation XVII. Domiciliary Quarantine of Communicable Diseases. For the Instruction of Health Officers.
- No. 56. The Law establishing Boards of Health in Cities of the Third Class.
- No. 57. Regulation XVIII. Regulations for the sanitary construction, management and control of industrial camps.
- Any of the above circulars may be obtained by residents of Pennsylvania on application to Dr. Benjamin Lee, Secretary of the State Board of Health, 1420 Chestnut street, Philadelphia, enclosing a two-cent postage stamp. The postage for the entire series, enclosed in a substantial box envelope, is ten cents.

BENJAMIN LEE, M. D.,
Secretary.

LEAFLET NO. 1.

State Board of Health of Pennsylvania.

Regulations to be Observed in the Sanitary Management of Small-pox in Private Dwellings.

The following regulations must be strictly observed in the treatment of small-pox in private families, and the physicians in attendance shall be held responsible for their observance by the Bureau of Health.

1. Physicians in general practice should leave their visits to small-pox patients until the latter part of the day, when all their other patients have been visited. They should then put on a suit of cloth

ing worn only in attending small-pox patients. After the visits are concluded, a warm bath should be taken, the water containing bichloride of mercury or carbolic acid. When practical, to allay alarm, it is well to visit small-pox patients after nightfall.

Physicians must provide themselves with a gossamer or duck gown of suitable material, sufficiently large to cover their entire person; a cap and rubber or linen gloves.

2. In country practice, the physician carries his protecting gown in a bag used only for this purpose, which receptacle he keeps well saturated with the fumes of formaldehyde.

A room in the dwelling shall be set aside for the exclusive use of the physician, in which his external clothing shall be removed, and the garments above mentioned put on.

After visiting the patient, the gown and the cap must be removed and sprayed immediately with a 40 per cent. solution of formaldehyde, and the rubber gloves immersed in a 1-2000 solution of bichloride of mercury.

The physician's face and hands must be bathed in a similar solution, or 95 per cent. alcohol before leaving the house.

A tub or other receptacle of sufficient size must be provided which must be kept in the room with the patient, and all towels, bed linen, and clothing, that have been used upon the patient or attendant, must be immediately immersed in a solution of 1-2000 bichloride of mercury, and remain therein for at least four hours before being removed to any other part of the dwelling.

All discharges from the patient must be received in vessels containing a sufficient quantity of a bichloride of mercury, 1-2000, to thoroughly disinfect them, and thoroughly mixed with the same.

All cess-pools, water-closets, sinks or laboratories receiving discharges or slop and waste water used in connection with the patient or attendant, shall have poured into them daily not less than one gallon of a 10 per cent. solution of carbolic acid.

The nurse or other attendant in charge of the patient shall not mingle with other inmates of the house, but such person shall confine himself or herself to the apartments occupied by the patient, and nurse.

In case of failure to observe these regulations the patient shall be immediately removed to the municipal or contagious disease hospital.

On his first visit, the physician must vaccinate all unprotected persons in the household.

While successful vaccination surely protects against small-pox, a certain number of vaccinations for various reasons fail. Hence, the physician should re-vaccinate in all case of failure at earliest moment possible. The vaccinated persons should be daily examined

for signs of varioloid. Attacks are often very mild, but are capable of propagating small-pox in its most fatal form.

Small-pox is contagious from the time of the first sensation of sickness. Patients should not be declared well so long as any scabs or ulcerations are present.

To Fumigate Buildings after Release of Patient.

1. Open up beds; stand mattress on end, hang clothing and bed clothes on clothes lines and over chairs. Lift carpets from floors and place them over chairs.

2. Open all doors between rooms. Close all outside doors and windows, filling all cracks and crevices with paper, or closing with adhesive plaster.

3. If a formaldehyde generator is used, estimate the cubic contents of the house and use three pints of wood alcohol for each 2,500 cubic feet. Continue to fumigate four hours and keep the house closed as long after as possible. If a formaldehyde regenerator is used, allow one pint of the formalin to each 1,000 cubic feet. Be thorough in fumigation. If a machine cannot be procured, suspend sheets sprinkled with a forty per cent. solution of formalin in the room. One sheet for every 1,000 cubic feet of space.

4. Disinfect all drains, outbuildings and foul places with chloride of lime or carbolic acid.

5. Follow directions for disinfection of the inmates of the house.

6. Burn beds, pillows and comfortables (haps) used by patients.

To Disinfect Individuals for Liberation.

1. Place all clean clothing which is to be taken from the house in a tight outbuilding or a closet in the house. Fumigate clothing with trunk or bag to be used in carrying clothing away for two (2) hours.

2. Require patient to take a bichloride bath (corrosive sublimate), four (4) tablets to a gallon of warm water, bathing head and hair especially well and using plenty of soap. See that the person actually takes the bath.

3. Place soiled clothing in wash tub, add disinfectants abundantly and notify family to boil clothing three (3) hours.

4. Dress him in fumigated clothing.

5. Make a note of boarding house to which he goes and keep him under observation for two weeks.

LAFLET NO. 2.

State Board of Health of Pennsylvania.

Pneumonia.

The Most Murderous Scourge of Civilized Peoples.

"The New Captain of the Men of Death."

1. Pneumonia is now well known to be a readily communicable ease like tuberculosis, diphtheria and influenza.

2. It is yearly becoming a greater and greater cause of death. It is now the most dreaded of diseases. Since 1900, it has caused more than one-eighth of all the deaths in Chicago, one-third more than consumption, and 44 per cent. more than all the other contagious and infectious diseases combined, including diphtheria, erysipelas, influenza, measles, puerperal fever, scarlet fever, small-pox, typhoid fever and whooping cough, the total of deaths from which was 4,489 as compared with a total of 6,560 deaths for pneumonia.

4. When a person is sick from pneumonia, the greatest care should be taken that the patient does not soil the bed clothes, carpet or furniture with his sputa. This should be discharged upon rags which should be burned before they become dry.

5. When a person recovers from pneumonia, his room should be thoroughly fumigated with formaldehyde, and the floors and walls wiped with a cloth damped with a two per cent. solution of carbolic acid.

Twelve ounces of formalin should be allowed for every thousand cubic feet of air space in the room to be disinfected.

6. Children who have had pneumonia should not return to school for three or four weeks after recovery, for they may still harbor the germs of the disease in their bodies.

7. The more poorly houses, offices, factories, theatres, churches, schools, passenger cars and other places where people congregate are ventilated the more probable it is that pneumonia will be propagated in them.

8. When pneumonia prevails, avoid the breathing of dust in public places so far as possible. This doubtless contains the germs of the disease.

9. Assist in enforcing the law against spitting in any public place. The sputa of the sick are full of dangerous germs.

10. When pneumonia prevails, avoid getting chilled, especially when tired. Keep the body well nourished, avoid alcoholic drinks, sleep in well ventilated rooms, avoid if possible overwork.

11. Persons sick of pneumonia are not sources of danger themselves, but the discharges from their mouths and noses are dangerous. If such a person has filthy habits, he may infect everything about him.

LEAFLET NO. 3.

State Board of Health of Pennsylvania.

Typhoid Fever.

During the prevalence of typhoid fever all persons are cautioned to use no water for domestic purposes until the same has been thoroughly boiled.

Nurses and attendants upon those ill with typhoid fever are required to pay particular attention to the disinfection of all discharges from the patients, and of all soiled linen, muslin or clothing by the following methods:

All discharges from patients must be received in vessels containing a solution (1 to 2,000) of bichloride of mercury. An equal volume of this solution should be added before disposing of the discharges in closets or privy vaults.

All soiled linen, muslin or clothing of any kind must be immediately immersed in a solution of bichloride of mercury (1 to 2,000) for at least two hours, after which it should be boiled for the same length of time. Any bedding unsuitable for such disinfection must be burned.

Tubs or other suitable vessels containing the disinfecting solution should be in readiness at all times and should be frequently refilled.

Attendants and nurses are cautioned against using the drinking vessels or the tableware used by the patients. Provision should be made for the exclusive use in the sick room of articles of this nature, and these should be frequently cleansed and disinfected.

Thorough disinfection of the hands of the attendants should be performed at frequent intervals, using the solution of mercury mentioned above.

Closets or sinks receiving slops or waste water used in connection with the patient should be flushed daily with a mixture of one pint of carbolic acid and two and a half gallons of water.

Failure to observe these precautions may result in the infection of those who are by necessity forced to be in close contact with typhoid fever patients.

LEAFLET NO. 4.

Commonwealth of Pennsylvania State Board of Health.

Vaccination Creed.

The State Board of Health of Pennsylvania, after years of experience with small-pox and vaccination, on the part of its inspectors and of local boards of health throughout the State, hereby declares, principally in the words of the declaration of the Commissioner of Health of the city of Chicago:

First.—That true vaccination—reported until it no longer “takes” ALWAYS prevents small-pox. NOTHING ELSE DOES.

Second.—That true vaccination—that is vaccination properly done on a CLEAN arm, with PURE lymph and kept perfectly CLEAN and UNBROKEN afterwards—never did and NEVER WILL make a serious sore.

Third.—That such a vaccination leaves a characteristic scar, unlike that from any other cause, which is recognizable during life and is the ONLY conclusive evidence of a successful vaccination.

Fourth.—That a slight disturbance of the general system at the time that the vaccination is at its height, is an indication that the entire system has been affected by the introduction of the virus and is, therefore, to be welcomed as an indication of protection rather than dreaded.

Fifth.—That no untoward results ever follow such vaccination, but that, on the other hand, thousands of lives are annually sacrificed through the neglect to vaccinate—a neglect begotten of LACK OF KNOWLEDGE.

Verification.

The Commissioner of Health of Chicago states that not one of the 727 cases of small-pox discovered in Chicago within the last four years was found vaccinated as defined in the vaccination creed.

The experience of Dr. Wm. M. Welch, physician to the Municipal Hospital of Philadelphia, and who has treated many thousands of

cases of small-pox, and of Dr. A. C. Abbott, president of the Board of Health of Philadelphia and Principal of the Laboratory of Hygiene of the University of Pennsylvania, which has been published repeatedly, is equally corroborative with the statements of the Heath Commissioner of Chicago in favor of the value of vaccination. To quote figures from the statements of these experienced officials would be simply to waste time.

It is to be understood that the vaccination herein referred to is that indicated in the second article of the vaccination creed, to wit: that made "on a clean arm, with pure lymph, and kept perfectly clean and unbroken afterwards."

Each one of these points is essential to a protective vaccination, and to freedom from serious soreness. The utmost attainable cleanliness; absolute purity of the vaccine lymph; an unbroken surface, by which latter all danger of contamination from external sources such as the atmosphere, clothing, soiled hands, is prevented.

How to Vaccinate and to Protect the Sore.

To be more specific on these points: The arm should be first thoroughly washed with soap and water and the site of the operation then wiped with alcohol. Blood should not be drawn; only the scarf skin scraped off. After the vaccination is made, wait a few minutes and pin a clean, soft handkerchief or a piece of clean, soft muslin to the shoulder-seam of the undershirt so as to hang loose over the spot and prevent the sleeve from rubbing it. This must be changed for a clean one every day, until the scab comes off and the surface is healed. The vesicle and resulting scab must not be broken or injured in any way and the arm and its coverings must be kept scrupulously clean from the time of the vaccination until it is well.

Experience has shown that cleanliness and the protection of the surface are best secured by the above method. The Board advises against the use of "shields," bandages, plasters or other dressings; but if these are used—as they are by many physicians—they should only be applied as directed by the physician himself, and with the utmost regard to cleanliness.

It must be repeated that the greatest care should be taken to prevent any breaking of the surface from time when the scarified spot has dried until the scab drops off naturally. The unbroken surface is nature's own "shield" against the access of disease germs. Do not scratch or rub, and do not handle the arm or change the handkerchief (or other dressing, if any) **WITH DIRTY HANDS.**

After a vaccination is made with pure lymph on a clean arm, the important points are to secure and maintain thorough cleanliness of the vesicle. There can be no infection of any kind or severe inflammatory action if these precautions are observed.

The vaccination thus indicated will—if the person be susceptible to small-pox at the time—usually “take” and always leave the characteristic or typical scar which, as stated in the third article of the vaccination creed, is the permanent and only conclusive evidence of a successful and thoroughly protective vaccination.

The rule is—REPEAT VACCINATION UNTIL THE SUSCEPTIBILITY TO VACCINE IS EXHAUSTED. When this is done it is impossible to contract small-pox. This is the protection given the employes of the Department of Health of Philadelphia who handle and nurse small-pox patients and bury the dead from the disease, and in no instance, among the hundred so employed, has anyone of them ever contracted small-pox.

Laws of the State of Pennsylvania in Regard to Vaccination.

1. Vaccination of school children.

Act of June 18, A. D. 1895.

Section 12. All principals or other persons in charge of public, private, parochial, Sunday or other schools are hereby required to refuse the admission of any child to the schools under their charge or supervision, except upon a certificate signed by a physician, setting forth that such CHILD HAS BEEN SUCCESSFULLY VACCINATED, or that it has previously had small-pox.

Section 13. The health authorities of said municipalites shall furnish to principals or other persons in charge of said schools, and to physicians the necessary certificates or blanks for the uses and purposes as set forth and required in sections one, eleven and twelve of this act. The registry of said schools shall exhibit the names and residences of all children or persons admitted or rejected for reasons set forth in this act, and said registry shall be open at all times to the inspection of the health authorities.

Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton, janitor, head of a family or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate any of the provisions or requirements of this act, shall, for every such offense, upon conviction thereof, before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offense was committed, be liable to a fine or penalty therefor of not less than five dollars, or more than one hundred dollars, which said fines or penalties shall be paid into the treasury of said municipality, and in default of payment thereof, such person or persons so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days.

2. Vaccination in cities of the second class.

Act of June 26, A. D. 1895, defining the powers and duties of the *bureau* of health in cities of the second class.

Section 27. The bureau of health may take such measures as it may from time to time deem necessary to prevent the spread of small-pox, by issuing an order requiring **ALL PERSONS** in the city, or any part thereof, **TO BE VACCINATED WITHIN SUCH TIME AS SAID BUREAU SHALL PRESCRIBE**, and all persons refusing or neglecting to obey such order, shall be liable to a fine of not less than five dollars nor more than twenty-five dollars. Provided, it shall be the duty of the bureau of health to provide for the vaccination of such persons as are unable to pay for the same, at the expense of such city.

3. Vaccination in cities of the third class.

Act of May 26, A. D. 1901.

Section 4. The said board of health shall have power and it shall be their duty to make and enforce all needful rules and regulations to prevent the introduction and spread of infectious or contagious diseases, by the regulation of intercourse with infected persons, by the arrest, separation and treatment of infected persons and persons who shall have been exposed to any infectious or contagious diseases, and by abating and removing all nuisances which they shall deem prejudicial to the public health, to enforce vaccination, * * * and make all such other regulations as they shall deem necessary for the preservation of the public health.

Section 6. The necessary rules and regulations for carrying into effect the powers and functions with which they are hereby invested, when approved by the mayor, shall have the force of ordinances of the city, and all penalties for the violation thereof, as well as expenses necessarily incurred in carrying the same into effect, shall be recoverable for the use of the city, in the same manner as penalties for the violation of city ordinances, subject to the like limitation as to the amount thereof.

4. Vaccination in boroughs.

Act of May 11, 1893, to enable borough councils to establish boards of health.

Section 4. The said board of health shall have power and it shall be their duty to make and enforce all needful rules and regulations to prevent the introduction and spread of infectious or contagious diseases, by the regulation of intercourse with infected places, by the arrest, separation and treatment of infected persons and persons who shall have been exposed to any infectious or contagious diseases, and by abating and removing all nuisances which they shall deem prejudicial to the public health, to **ENFORCE VACCINATION**, * * * and to make all such other regulations as they shall deem necessary for the preservation of the public health.

Section 6. The rules and regulations of the board, when approved by the borough council and chief burgess, and when advertised in the same manner as other ordinances, shall have the force of ordinances

of the borough; and all penalties for the violation thereof, as well as expenses necessarily incurred in carrying the same into effect, shall be recoverable for the use of the borough in the same manner as penalties for the violation of borough ordinances, subject to the like limitation as to the amount thereof.

The constitutionality of these laws has been affirmed by the courts.

THE VARIOUS TYPES OF SMALL-POX.

BY BENJAMIN LEE, M. D., *Secretary of the State Board of Health.*

Small-pox is like an invading army; it is an inexorable foe, sparing no age or sex, and even when it does not kill, often leaving its victim hopelessly disfigured and maimed. When an army is approaching a city, martial law is declared in the city, overriding the rights and liberties of the citizen, invading the sanctity of his home and curtailing his freedom. This is essential for the protection of all and for carrying out the plan of defence. Though this is well known, it is not generally appreciated that in time of pestilence, sanitary law must take the place of ordinary law. The health officer then assumes command. He locks the gates, declares who shall enter and who may leave. He may remove anyone to a place of safety, he may enter where he suspects a lurking enemy and may imprison any one if necessary. His power is absolute. Only thus are the impulses, affections, selfishness and obstinacy of many controlled, enabling him to separate the sick from the well and stamp out the epidemic. Much depends on the degree of protection and the accuracy of the information from his scouts. As to the epidemic now prevailing for so long a time, it is claimed by the State Board of Health that ample warning was given in advance. In December, 1898, a circular cautionary was distributed widely, urging vaccination, and the establishment of emergency hospitals away from the centres of population. Little notice was taken save in the larger cities—notably in Philadelphia, Pittsburg, Harrisburg, Scranton, Wilkes-Barre, etc. Mostly it fell upon deaf ears. Twice later did our board sound a general alarm, and scarcely a week has passed that we have not warned some community of danger. The scouting service was lamentably deficient. The scouts were not familiar with their duty, the enemy was allowed to penetrate communities

and many victims were prostrated. The scouts were the physicians in the country districts, who in the majority of cases did not recognize the character of the disease. They knew small-pox only in the description of typical cases in text books, and as this epidemic was of a peculiar character, finding that it was an eruptive disease, they baptized it with a wonderful and most incongruous selection of names, *impetigo contagiosa*, Cuban itch, *purpura haemorrhagica*, chicken-pox, bold hives, varicella, Filipino measles, eruptive grip, bean pox, watery pox, swine pox, that new disease, erythema, pneumonia, Italian eczema, pustula eczema, elephant itch, continued eruptive fever, yaws, yarrows, rubeola, eruptive influenza, petechial fever and hemorrhagic measles.

This experience was paralleled by the ingenuity of the physicians of Plymouth, in this State, in inventing designations for the earlier cases of typhoid fever in the terrible epidemic of 1885. This tendency on the part of physicians to fail or refuse to recognize epidemic diseases, is due in part to their dread of being considered alarmists; and boards of health are too apt to be influenced by the same motive. The fact is, it is the duty of boards to be alarmists. They are the watchmen on the tower. If they allow themselves to be influenced by representations of business men that the publication of the truth with regard to the occurrence of a contagious disease will injure business, they are false to their oath. The rich who can jingle gold, the politician with a pull, the councilman afraid to incur the displeasure of his constituents, none should be heeded by a board of health when they counsel secrecy. What would be thought of a policeman who detecting smoke issuing from a cellar or dwelling should say to himself, "It will give the people a terrible alarm if I bang on the door and call fire! I will make another round and when I come back will be able to tell if the house is afire." You are ready to laugh at such a supposition, yet this is precisely the position of a board of health, which on the appearance of an epidemic, fails to warn all of the real condition.

And now allow me to tell you that it is possible to name and describe not less than nine more or less distinct, well marked types of small-pox. No physician, unless posted on these types, has a right to assert his opinion in the diagnosis of this disease, in opposition to one who has enjoyed such advantages.

The first type is Natural Discrete Small-pox. All others are variations. Note "discrete" not "discreet." Small-pox exercises no discreteness as to whom it shall attack. Its victims are generally destitute of discreteness, as shown by the fact that they have not been wise enough to protect themselves by vaccination. Discrete means distinct, separate, because the pocks or pustules remain

distinct, separate, during the whole course of the disease. When the following symptoms are present, there is grave reason to suspect small-pox: throbbing headache, coming suddenly, principally in the forehead and temples; backache, worst in the small of the back; pain in the pit of the stomach, often accompanied by vomiting, high pulse and temperature, gradually rising, slight rashes here and there over the surface and especially a purple discoloration of the groin. This last will often decide the diagnosis. If small-pox is present in the neighborhood the occurrence of and continuance of these symptoms for a period of two or three days will render the physician of experience fairly certain of the nature of the case and will warrant him in taking all such precautions as though the eruption were fully out, because in this stage the disease is unquestionably contagious and infectious. In rare cases there is violent delirium from the first. Usually about the third day little red spots begin to show themselves on the face, arms, wrists and back of hands. These rapidly increase in size, becoming hard, prominent pimples, feeling like shot under the finger. In twenty-four hours a small water blister shows itself on the top of the pimple. This is known as the vesicular stage and continues about four days, by which time the pocks are nearly a quarter of an inch across, circular, with some times a depression in the centre and surrounded by a distinct red line. In three or four days more they have swelled up into cone shaped pustules, the pearly, watery fluid having changed to yellow pus, and the eruption is quite generally distributed over the body and limbs. This is the pustular stage.

It is unnecessary to follow it further in its process of decline and dessication, as any case presenting this series of symptoms is small-pox, no matter what the subsequent course may be. No sooner is the eruption out than all the distressing symptoms disappear and the patient often pronounces himself well. All other types are simply variations of this standard form.

The second type is Natural Confluent Small-pox. Confluent means flowing together. The entire skin seems to be inflamed, the pustules are crowded together and as they enlarge run into each other until the surface is one huge sore. When the face is effected thus, the patient is utterly unrecognizable. This form is more fatal than the discrete. The initial symptoms are precisely the same.

The third type is Modified Small-pox, generally called varioloid. This is the phase after vaccination, but not to the point of complete protection. The symptoms are milder and more brief. Each stage is less severe and shorter. There are fewer vesicles and pustules, many vesicles fail to become pustules. The initial symptoms however are often quite severe. The whole eruption may be out in twelve hours after the first pimple appears and the vesicles may be

completely formed in twenty-four hours. When the eruption is out, the patient is generally comfortable and remains so. This is why varioloid is so dangerous to the community. All are thrown off their guard, precautions are relaxed, though the patient is capable of infecting others with true small-pox in its worst form.

Fourth, Modified Confluent Small-pox or Confluent Varioloid. The only variation in this form from the last is that confluence of the pustules takes place and the suffering from the sores is greater. Death rarely occurs here.

The fifth is the hemorrhagic form, called Black Small-pox, is more frequent than supposed and very misleading. The early symptoms are as described but of great severity, except that the temperature is not high. Quite early, little spots, either dull red, purple or violet, appear on the surface, owing to hemorrhages in the skin. The whites of the eyes are full of blood, blood oozes from the gums and nostrils. Death occurs from the third to the sixth day without the occurrence of the true eruption.

Sixth form, Hemorrhagic Vesicular Small-pox. In some cases the vitality of the patient is such that the destruction of the blood by the poison is checked, so as to allow the system to relieve itself by the development of vesicles and pustules which are mixed in with the petechiae or hemorrhagic spots. This aids the physician in his diagnosis, and recovery takes place.

Seventh, Pseudo-Hemorrhagic Small-pox. Here the disease runs the natural course till the vesicles are well developed, when they turn purplish red, evidently containing blood. This is probably due to some peculiarity in the circulation. The majority recover.

Eighth. One of the most peculiar forms of small-pox without eruption. The initial symptoms are often severe, but when the doctor is looking for the papules to appear the fever diminishes, the patient is soon well, no eruption appears. It is probable that such cases can communicate the disease, and all care should be taken.

It is evident from the preceding description that the man who has before his mind only one picture of small-pox, the typical form, will often fail to recognize any variations.

The ninth form is what has been appearing in many parts of our State and has been a stumbling block to many. The physician does not attribute sufficient importance to the initial symptoms. It is well known that intense and protracted heat diminishes the potency both of vaccine virus and of small-pox virus. It is also well known that in Cuba, Porto Rico and the West Indies generally, small-pox has long ceased to be dreaded because of its mildness. It is matter of course that children should have small-pox, and no precautions are taken. You expect to meet people with small-pox scabs on their faces in the street. The poison has lost its virulence. This form was

contracted by our troops there, and brought to this country; has been traveling ever since, numbering tens of thousands of victims. In a single not very populous county in this State, the Inspector found not less than 1,200 cases during the past year. The following are the characteristics: Initial symptoms precisely the same as those of natural small-pox, of same duration, usually more severe and longer than in modified small-pox. All the symptoms abate when the eruption appears; the eruption seeks the same locations as those of typical small-pox, follows the same course, papular, with shot-like feeling under the skin, vesicular to the point of suppuration, but at this stage the poison seems to have spent itself and many vesicles fail to become pustular, rapidly dry up and disappear. The eruption may be either discrete or confluent; the latter is rare. Death is unusual. This point misleads physicians. They look upon death as the leading symptoms of small-pox. If the patient recovers readily the chances are against the diagnosis. In natural small-pox when nearly all the vesicles go on to suppuration there is a return of fever known as "secondary fever." When that stage is reached the profuse suppuration causes a peculiar odor. Both these are generally absent in Tropical Small-pox. One fact should compel the thoughtful attention of the physician in an epidemic of this disease; that is the unusual number of adults attacked. Chicken-pox, for which it is often mistaken, prevails almost entirely among children. Other points of difference are the almost entire absence in the latter of the initial period before the eruption. If this occurs at all, it lasts not more than half a day and is mild. The child goes to bed well and rises in the morning with a well developed eruption. The eruption usually begins and is most marked on the body. It is not so circular, often larger, oval, does not pustulate. While this form of small-pox as seen to-day is new to practitioners, yet it is not new in medical literature. I have in my library a book on Practice of Medicine, written one hundred years ago by the court physician of Austria, a very large part of which is devoted to small-pox alone, a fact which shows how prevalent the disease was then. It is almost identical in description with the disease of the present day. In this work a type is described of the form now so prevalent. It is possible that it may have been imported from Africa, the northern portion of which lies close to the tropics, or from Arabia. It was rarely fatal. As bearing on the theory advanced in the earlier part of this paper that the modification of the potency of the poison is due to the exposure to high temperatures, it is interesting to note that since the virus has been subject to the influence of a northern climate it has gradually increased in intensity. The mortality when the disease first invaded the State in 1898 was only about one-half of one per cent. The next

report showed it to be more than one per cent.; the next eight per cent., in some places running up to eighteen and twenty per cent. The figures for the entire period of about three and a half years, as nearly as can be reached, for the entire State are seven thousand five hundred and twenty-five cases, with five hundred and fifty-two deaths, which gives a percentage of deaths of about seven and one-third per cent. It is safe to say that the infection is now ten times more fatal than when it was first introduced. It is therefore not justifiable to declare, as some persons have done, that this epidemic is so mild that it is better to take the disease than to undergo the pain of vaccination. It is the duty of every good citizen to protect himself and his family from this contagion by the only known means, and it is the duty of all boards of health and all school boards to secure general vaccination by every means in their power. It is also the bounden duty of every good and patriotic citizen to uphold the hands of the sanitary authorities in their efforts to combat the public enemy, disease, and to submit willingly and cheerfully to every requirement of said authorities, even at the expense of serious personal inconvenience and loss.



APPENDIX M.

Laws of the Commonwealth of Pennsylvania for the Better Protection of Life and Health, Passed by the General Assembly in the Year 1903.

No. 1. An act to repeal an act, entitled "An act for the protection of the public health, prohibiting hereafter the establishing or maintaining of additional hospitals, pest-houses and burial grounds in the built up portions of cities," approved the 20th day of April, A. D. 1899.

No. 22. An act providing for the relief of needy, sick, injured, and in case of death, burial of indigent persons, whose legal place of settlement is unknown, or not within the State of Pennsylvania, at the expense of the county where relief is required, and with notice to the county commissioners thereof.

No. 50. An act to amend the fifteenth section of an act, entitled "An act to regulate the employment and to provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works or printing offices, and to provide for the safety of men, women and children in hotels, school buildings, seminaries, colleges, academies, hospitals, storehouses, public halls and places of amusement, by requiring proper fire escapes; and to provide for the appointment of inspectors, office clerks and others to enforce the same," approved the 29th day of May, A. D. 1901

No. 57. A supplement to an act, entitled "An act creating a Bureau of Health in the Department of Public Safety in cities of the second class, defining the powers and duties thereof and the officers thereunder, prescribing rules, regulations and laws respecting the public health, and authorizing and imposing fines, penalties and punishments for violation thereof," approved June 26th, 1895.

No. 58. An act extending the powers of the State Board of Health for the purpose of enabling it to meet the emergency occasioned by the epidemic of small-pox now prevailing in the various parts of this Commonwealth, providing a penalty for the violation of the rules and regulations prescribed by the said board of health, and making an appropriation for the purpose of carrying this act into effect.

No. 60. An act to encourage the repression of tuberculosis of cattle, and to provide for the disposition of the carcasses of meat-producing animals that are infected with tuberculosis to a degree that renders their flesh unfit for use as food.

No. 80. To prevent the spread of the disease known as rabies, or hydrophobia, and to authorize the quarantine, restraint, confinement, or muzzling of dogs, during outbreaks of this disease; and to empower the State Live Stock Sanitary Board to enforce the provisions of this act.

No. 87. A supplement to an act, entitled "An act regulating the construction, maintenance, alteration and inspection of buildings and party walls in cities of the second class," approved the 7th day of June, A. D. 1895; regulating the construction, alteration and ventilation of tenement houses, and providing for the safety of the inhabitants thereof; and providing penalties for the violation of the same.

No. 100. An act to amend section twenty of an act, entitled "An act to provide for the more effective protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895, allowing school directors and constables to be members of a board of health.

No. 110. An act for the protection of the health of persons addicted to the smoking of cigarettes, and imposing a fine for the violation of its provisions.

No. 112. An act entitled a supplement to an act to provide for the better government of cities of the first class in this Commonwealth, amending articles two, three, ten and twelve; and providing for a Department of Public Health and Charities, in lieu of the Department of Charities and Corrections.

No. 132. An act to protect the public health and prevent the spread of infectious and contagious diseases in this Commonwealth, providing for the systematic inspection of school buildings.

No. 142. An act to prohibit the discharge of flobert rifles, air guns, spring guns, in cities and boroughs of this Commonwealth.

No. 179. An act to amend the twenty-first section of an act entitled "An act to provide for the more effectual protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895, limiting the time in which actions may be brought for recovery of fines or penalties under said act.

No. 192. An act regulating the sale or prescription of cocaine or of any patent or proprietary remedy containing cocaine, and prescribing penalties for the violation thereof.

No. 236. An act to further regulate the construction, maintenance and inspection of buildings and party walls, in cities of the first class.

No. 254. An act prohibiting the adulteration of food, and providing for the enforcement thereof.

No. 313. An act to provide for the current expenses of the State Board of Health and Vital Statistics, for the two fiscal years commencing the first day of June, 1903.

No. 395. An act to establish an emergency fund, to be used as occasion may require, in the suppression of epidemics, the prevention of disease, and protection of human life in times of epidemic disease or disaster threatening disease, and making an appropriation therefor.

No. 430. An act making an appropriation for the erection and fitting of a sanatorium and for the maintenance thereof on the State Forestry Reservation at Mont Alto, in Franklin or Adams counties, and authorizing the Commissioner of Forestry to make and enforce rules and regulations governing the same, approved the 15th day of May, A. D. 1903.

No. 1.

AN ACT

To repeal an act, entitled "An act for the protection of the public health, prohibiting hereafter the establishing or maintenance of additional hospital, pest-houses, and burial grounds in the built-up portions of cities," approved the 20th day of April, A. D. 1899.

Section 1. Be it enacted, &c., That the act of Assembly approved the 20th day of April, A. D. 1899, entitled "An act for the protection of the public health, prohibiting hereafter the establishing or maintenance of additional hospitals, pest-houses, and burial grounds in the built-up portions of cities," and which reads as follows

"Section 1. Be it enacted by the Senate and House of Representatives in General Assembly met, and it is hereby enacted by the authority of the same, That for the purpose of protecting the public health, it shall be unlawful hereafter to establish or maintain any additional hospital, pest-house or burial ground in the built-up portions of cities. Provided, however, That nothing herein contained shall be so construed as to prevent the maintenance of any hospital, pest-house,

Act of April 20,
1899, cited.

Repeal.

or burial ground now lawfully established and maintained in such portions of cities," be and the same is hereby repealed.

Approved—The 28th day of January, A. D. 1903.

SAML. W. PENNYPACKER.

No. 22.

AN ACT

Providing for the relief of needy, sick, injured, and, in case of death, burial of, indigent persons, whose legal place of settlement is unknown, or not within the State of Pennsylvania, at the expense of the county where relief is required, and with notice to the county commissioners thereof.

Duty of poor directors, etc.

Relief of needy, sick and injured.

Burial.

Notice to county commissioners.

Section 1. Be it enacted, &c., That in each and every county of this Commonwealth, in which a poor or almshouse for the support, care and shelter of the needy and indigent is not maintained by and at county expense, it shall be the duty of the poor-directors or overseers of the poor of the several poor-districts, in such counties, to provide all needy, sick and injured indigent person or persons, in their said several districts, with necessary support, shelter, medicine, medical attendance, nursing, and, in case of death, burial, whether said needy, sick and injured indigent person or persons have a legal settlement in the poor-district in which they thus require assistance or not; but if such indigent person or persons have no known legal settlement within the Commonwealth of Pennsylvania, it shall be lawful for such directors or overseers to notify the commissioners of the county, where such relief is asked or required, of the necessity for such relief to such indigent person or persons; and, from and after such notice, the expense of such relief or burial shall be borne by the county in which the poor-district furnishing the same is located; or, in their discretion, the commissioners of such county may take charge of such indigent person or persons, and provide necessary relief or burial at the expense of the county. And in event of any such poor-district, after due notice to commissioners and their election not to take

charge of such indigent person or persons, having assumed or paid the expense thus incurred for the relief or burial of such indigent person or persons, whose legal settlement is unknown, the county in which such poor-district is located shall be liable to such poor-district in an action in assumpsit, in a civil court, for the amount thus expended or incurred, and the want of an order of relief or approval order shall not be a bar to recovery: Provided, Nothing in this act shall be held to change the law as provided in the act of June 13, 1883, regarding the duties of officials in charge or control of dead bodies.

The county's liability.

Proviso.

Section 2. All acts or parts of acts inconsistent herewith be and the same are hereby repealed.

Repeal.

Approved—The 6th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 50.

AN ACT

To amend the fifteenth section of an act, entitled "An act to regulate the employment and to provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works or printing offices; and to provide for the safety of men, women and children in hotels, school buildings, seminaries, colleges, academies, hospitals, storehouses, public halls and places of amusement, by requiring proper fire-escapes; and to provide for the appointment of inspectors, office clerks and others to enforce the same," approved the 29th day of May, A. D. 1891.

Section 1. Be it enacted, &c., That section fifteen of an act, entitled "An act to regulate the employment and provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works, or printing offices; and to provide for the safety of men, women and children in hotels, school buildings, seminaries, colleges, academies, hospitals, storehouses, public halls and places of amusements, by requiring proper fire-escapes; and to provide for the appointment of inspectors, office clerks and others to enforce

the same," approved the 29th day of May, A. D. 1891, which reads as follows:

Section 15, act of May 29, 1901, cited for amendment.

"Section 15. The Factory Inspector, in order to more effectually carry out the provisions of the factory, bake-shop, sweat-shop and fire-escape laws, is hereby authorized to appoint twenty-five (25) deputy factory inspectors, five of whom shall be women, at a salary of twelve hundred dollars per year; a chief clerk for the department, at a salary of sixteen hundred dollars per year; an assistant clerk and stenographer, at a salary of eleven hundred dollars per year, and a messenger, at a salary of eight hundred dollars per year," be and the same is hereby amended so as to be and read as follows:

Factory Inspector.

Section 15. The Factory Inspector, in order to more effectually carry out the provisions of the factory, bake-shop, sweat-shop, and fire-escape laws, is hereby authorized to appoint thirty-seven (37) deputy factory inspectors, five of whom shall be women, at a salary of twelve hundred dollars per year; a chief clerk for the department, at a salary of sixteen hundred dollars per year; two assistant clerks, one of whom shall be a skilled stenographer, at a salary of fourteen hundred dollars per each, each; and a messenger, at a salary of nine hundred dollars per year.

Appointment of deputies, etc., by

Approved—The 20th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 57.

A SUPPLEMENT

To an act, entitled "An act creating a bureau of health in the department of public safety in cities of the second class; defining the powers and duties thereof and the officers thereunder; prescribing rules, regulations and laws respecting the public health, and authorizing and imposing fines, penalties and punishments for violations thereof," approved June 26, 1895.

Section 1. Be it enacted, &c., That certain words used in this act shall be defined, for the purposes thereof, as follows:

"Tenement-house" is any house or building, or portion thereof, which is: (a) intended or designated to be occupied, or (b) leased for occupation, or (c) actually occupied as a home or residence for three or more families, living in separate apartments, and doing their cooking upon the premises.

"Tenement-house" defined.

"Apartment" is a room or suite of two or more rooms, occupied or leased for occupation, or intended or designed to be occupied, as a family domicile.

"Apartment" defined.

"Basement" is a story partly, but not more than one-half,— "cellar" is a story more than one-half,—below the level of the street or ground adjacent to or adjoining the same; where the grade of a street adjacent to, or of ground surrounding, a tenement-house varies, the mean or average grade of such street or ground shall be regarded as the grade of such street or ground, in the meaning of this act.

"Basement" defined.

"Cellar" defined.

Grade.

Section 2. In no tenement-house shall any room or apartment in the cellar be hereafter constructed, altered, converted, leased or occupied for living purposes, and no room or apartment in the basement of any such building shall be constructed, altered, converted, leased or occupied for living purposes, unless the following conditions be complied with, viz:

Cellar or basement for living purposes.

1. Every room shall be at least eight feet six inches high, in every part, from floor to ceiling.

Conditions.

2. Every such room shall have a window or windows opening upon the street, or upon a yard or court. The total area of the windows in such room shall be at least one-eighth of the floor area of the room, and one-half of the sash shall be made to open the full width, and the top of each window shall be within six inches of the ceiling.

3. There shall be appurtenant to every such room or apartment a water-closet, conforming in design, materials and construction to the building and health regulations of cities of the second class.

Section 3. All such basements, used for living purposes, shall be specially subject to examination by the bureau of health, and if found to be damp or otherwise unfit for habitation, the owner thereof shall be required to put the same in proper condition, or abandon the same for living purposes.

Examination by Bureau of Health.

Section 4. No room (other than basement-rooms, provision for which

of this

Windows.

amendment) in any tenement-house hereafter to be erected or constructed, or altered into a tenement-house, shall be leased or occupied for living purposes, unless it contains at least one window having a superficial area of not less than one-tenth of the floor area of the room, which window opens upon a street or alley, or upon a yard or court, having a sectional area of less than one hundred square feet; and no room shall be so leased or occupied in any now existing tenement-house, unless it contains a window of the foregoing dimensions, opening upon a street or alley or upon a yard or court having a sectional area of less than twenty-five square feet; or unless such room adjoins another room in the same apartment, which other room has such a window, opening upon such a street, alley, yard or court, and between which two adjoining rooms there is a sash-window having at least fifteen square feet of glazed surface, the upper half of which is made to open easily.

Dimensions.

Proviso.

Section 5. No room in any tenement-house shall be leased or occupied for living purposes unless it be of such dimension as to contain at least seven hundred cubic feet of air, nor unless every part of the finished ceiling of such room be at least eight feet distant from every part of the finished floor thereof: Provided, That an attic-room need be of eight feet high in but one-half of its area.

Air allowance.

Section 6. No room in any tenement-house shall be so occupied that the allowance of air to each person living in such room shall, at any time, be less than four hundred cubic feet for each such person more than twelve years old, and two hundred cubic feet for each person of twelve years or under.

Water supply.
Sinks.

Section 7. In all tenement-houses hereafter erected, whenever a connection with the city water-main is in any way possible (and of this possibility the bureau of health of said cities shall be the sole judge), there shall be an independent water supply, and at least one sink for every tenement or suite of rooms; and in every now existing tenement-house, or house that may be hereafter converted into a tenement-house, there shall be on every floor at least one proper sink, with running water, accessible to all the tenants of that floor, without passing through any other apartment, if there be no such sink in each apartment; and the space under

all sinks shall have no woodwork enclosing the same, but shall be left entirely open.

Section 8. In every tenement-house hereafter to be erected, whenever a connection with a public sewer is in any way possible (and of this possibility the bureau of health shall be the sole judge), there shall be one water-closet for every tenement or suite of rooms which has its own independent hallway, so separated that its rooms do not open or connect with any other rooms; and in tenement-houses so constructed that a tenement may consist of a single room or of two rooms, there shall be at least one water-closet for every three rooms: Provided, That in the case of buildings existing at the date of this act, which shall hereafter be altered into tenement-houses, there shall be one water-closet for six rooms, but not less than one for each floor. In every now existing tenement-house there shall be (subject to the possibility of connection with public sewer, as above set forth) at least one water-closet for every two apartments. Every water-closet shall be separated from every other water-closet, and shall have an entrance entirely independent of the entrance to every other water-closet. And every such water-closet shall be properly ventilated, in accordance with the regulations governing the same already in force in said cities. When necessary (and of this necessity the said bureau of health shall be the judge) such water-closets may be located in the yard. Wherever located, the said water-closets shall conform in design, materials and construction to the building and health regulations of said cities.

Water-closets.

Section 9. Every tenement-house, and every part thereof, shall be kept in good repair, and shall be clean and free from any accumulations of dirt, filth or garbage, or other matter, in or on the same, or in the yards, courts, passages, areas or alleys connected with or belonging to the same.

Repair.

Filth, garbage,
etc.

Section 10. No horse, cow, swine, pig, sheep, goat or poultry shall be kept in any tenement-house; and no tenement-house or part thereof, shall be used as a stable, or for the storage of anything dangerous to life or detrimental to health; nor shall any explosive, inflammable or combustible thing be placed or stored under any stairway in any tenement-house.

Domestic animals.

Inflammable or
combustible material.

Fine and penalty.

Section 11. Any violations of the provisions of this act shall subject the person or persons so offending to a fine or penalty of not less than ten dollars nor more than one hundred dollars; and any such violation of the provisions of this act, if continued after the first fine is imposed therefor, shall, for every week of such continuance, be punishable by an additional fine of not less than ten dollars nor more than one hundred dollars. All such fines and penalties shall be collected and enforced in the manner provided by section forty-two of the act to which this is a supplement.

Section 12. Whenever any of such cities shall have incurred expense in enforcing any of the provisions of this act, imposing duties upon persons or corporations, such cities shall have the right to recover the same by action of assumpsit from the owner or occupants of the premises, or other persons or corporations, failing or refusing to comply with or execute the same.

Special inspectors.

Section 13. The bureau of health of such cities shall employ one or more special tenement-house inspectors, whose duty it shall be to regularly inspect the tenement houses within the purview of this act, and to see that the requirements therefor are enforced.

Approved—The 25th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 58.

AN ACT

Extending the powers of the State Board of Health, for the purpose of enabling it to meet the emergency occasioned by the epidemic of small-pox now prevailing in the various parts of this Commonwealth; providing a penalty for the violation of the rules and regulations prescribed by the said Board of Health, and making an appropriation for the purpose of carrying this act into effect.

Preamble.

Whereas, An epidemic of small-pox has prevailed for several months past in various parts of this Commonwealth, and is threatening other localities, by reason of the inability of the local authorities, under

the present laws, to properly cope therewith; therefore,

Section 1. Be it enacted, &c., That the State Board of Health is hereby authorized and empowered to quarantine any building or buildings in which small-pox may at any time exist, in any place where a local board of health does not exist, or in any communities in which small-pox exists in such epidemic form as to be, in the judgment of the State Board of Health, dangerous to other communities; and to adopt such rules and regulations as they deem necessary for the purpose of carrying this act into effect; and may appoint officers, to be known as quarantine officers, who shall have all the powers of constables, for the purpose of enforcing said rules and regulations.

State Board of Health.

Quarantine.

Rules and regulations.

Quarantine officers.

Section 2. Whenever local boards of health exist, the State Board of Health is hereby authorized and empowered to adopt such rules and regulations as it may deem necessary for the purpose of carrying this act into effect; and, in case of the failure or refusal of the local boards of health to observe or obey said rules and regulations, no part of the appropriation hereby made shall be expended in such communities.

In case of failure or refusal of local board.

Section 3. Any person, not a physician, nurse, or other duly authorized attendant or visitor, lay, professional or clerical, to any quarantined building or buildings, who, in the presence of any member of the State Board of Health or of the local boards, or in the presence of any quarantine officer, has broken quarantine regulations or successfully induced others to break quarantine regulations, by coming out of, or by entering into and coming out of, any quarantined building or buildings and mingling with other people, or going to places where people congregate or are likely to congregate, either hall, house, shop, store, farm, post-office, church, street, highway or road; or who sends, by messenger, express or post, packages, parcels, goods or supplies, which have not been previously marked "permitted" by the physician in charge, from any quarantined building or buildings to any point outside of said building or buildings; or who tears down or displaces any sign, placard, poster or notice placed on any quarantined building or buildings by order of the board of health; may be arrested forthwith, without warrant, by any of the members of the

Breaking quarantine regulations.

Arrest without warrant.

State Board of Health or of the local boards of health, or by any of the quarantine officers appointed by the State Board of Health, under the authority herein given; and any person, not a physician, nurse or other duly authorized attendant or visitor, lay, professional or clerical, to any quarantined building or buildings, who, upon credible information communicated either to any member of the State Board of Health or of the local boards or to any quarantine officer, is charged with breaking quarantine regulations or successfully inducing others to break quarantine regulations, by coming out of, or by entering into and coming out of, any quarantined building or buildings and mingling with other people, or going to places where people congregate, either hall, house, shop, store, farm, post-office, church, street, highway or road; or by sending, by messenger, express or post, packages, parcels, goods or supplies, which have not been previously marked "permitted" by the physician in charge, from any quarantined building or buildings to any point outside of said building or buildings; or who is charged with tearing down or displacing any sign, placard, poster or notice placed on any quarantined building by order of the board of health; may be arrested, upon warrant, by any of the members of the State Board of Health or of the local boards of health, or any of the said quarantine officers, or any other constable, police officer of this Commonwealth; and such person so offending, whether arrested with or without warrant, as above provided, shall be deemed guilty of a misdemeanor, and upon conviction, in the court of quarter sessions for the proper county, of any of the acts hereinbefore stated, shall be sentenced to pay a fine not exceeding one thousand dollars, and undergo an imprisonment not exceeding one year, either or both, at the discretion of the court.

Section 4. That the sum of fifty thousand dollars be and the same is hereby specifically appropriated, out of any money in the treasury not otherwise appropriated, to the State Board of Health, for the purpose of assisting the people of the communities in which small-pox now exists, or may hereafter exist, in stamping out said disease, and in carrying out the purposes of this law.

Section 5. This act shall continue in force for the period of two years from the date of its passage, and no longer. Limitation of act.

Approved—The 25th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 60.

AN ACT

To encourage the repression of tuberculosis of cattle, and to provide for the disposition of the carcasses of meat-producing animals that are infected with tuberculosis to a degree that renders their flesh unfit for use as food.

Section 1. Be it enacted, &c., That whenever it comes to the knowledge of the secretary of the State Live Stock Sanitary Board, or an agent of that board who is authorized to inspect animals, that a meat-producing animal, killed for food, was found to be infected with tuberculosis, or with a disease resembling tuberculosis, it shall be the duty of the secretary of the State Live Stock Sanitary Board, either himself or by deputy, or of an authorized agent of the State Live Stock Sanitary Board, to make an inspection of the said dead animal and its parts, for the purpose of ascertaining whether it is or was infected with tuberculosis, and, if infected, to what extent.

Tuberculosis of cattle.

Inspection.

Section 2. If it shall be found that the animal, from which the carcass or meat came, was infected with tuberculosis, or other infectious disease, and to a degree that renders the flesh unfit for use as food, the said dead animal, carcass or meat, shall be condemned, and shall be disposed of by the use of any method that is approved by the State Live Stock Sanitary Board. For the guidance of inspectors of animals and meats, and of agents of the State Live Stock Sanitary Board, rules for the inspection of the carcasses of meat-producing animals may be promulgated by the State Live Stock Sanitary Board, or, in the absence of such rules, the rules of the United States Bureau of Animal Industry, that cover the inspection of animals and car-

Condemnation of and disposition of carcass.

Rules for inspection.

casses for tuberculosis in abattoirs under federal inspection, shall be observed.

Certificate.

Appraisalment.

Valuation.

How appraised
valuation shall be
paid.

Section 3. When it is decided by a meat inspector, approved in respect to competency and reliability by the secretary of the State Live Stock Sanitary Board, or by a member or agent of the State Live Stock Sanitary Board, and certified by him in writing on an official form that shall be provided for this purpose by the State Live Stock Sanitary Board, that the flesh of a meat-producing animal is unfit for use as food, on account of the fact that the animal from which it came was infected with tuberculosis to an injurious degree, the said meat or carcass may be appraised, by agreement between a member or agent of the State Live Stock Sanitary Board and the owner or his agent, or, if an agreement cannot be made, three appraisers shall be appointed, one by the owner or his agent, one by the State Live Stock Sanitary Board or its authorized agent, and the third by the two so appointed, who shall, under oath or affirmation, fairly and impartially appraise the meat or carcass, taking into consideration its apparent market value at the time of appraisalment: Provided, however, That such appraised valuation shall not exceed five cents per pound, nor twenty-five dollars for the entire carcass.

Section 4. The amount of the agreed or appraised valuation shall be paid by the State Live Stock Sanitary Board, in the same manner as other expenses of said board are paid, upon the presentation of satisfactory certificates of condemnation and valuation, and satisfactory evidence in writing that the condemned animal has been continuously in the State of Pennsylvania for not less than four months prior to slaughter, and that the carcass was disposed of in a way that had been approved by the State Live Stock Sanitary Board.

Approved—The 25th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 80.

AN ACT

To prevent the spread of the disease known as rabies, or hydrophobia; and to authorize the quarantine, restraint, confinement or muzzling of dogs, during outbreaks of this disease; and to empower the State Live Stock Sanitary Board to enforce the provisions of this act.

Section 1. Be it enacted, &c., That whenever the disease known as rabies, or hydrophobia, shall occur among the dogs or other animals, in any locality in Pennsylvania, and it is adjudged by the State Live Stock Sanitary Board that the disease is spreading, or is liable to be spread by dogs that have been exposed, the said Board may order the quarantine, restraint, confinement, or muzzling of any or all dogs, within the limits of the locality in which the danger of infection is deemed to exist. The authority hereby conferred is not to annul or restrict the authority now possessed by cities or boroughs to quarantine, restrain, confine or muzzle dogs, within the limits of their respective jurisdictions.

Rabies, or hydrophobia.

Quarantine, restraint, muzzling, etc.

Section 2. A quarantine, or order to restrain, confine or muzzle dogs, shall be operative when it is approved by a majority of the members of the State Live Stock Sanitary Board, and when a copy of it has been left at the usual place of residence of the owner of the dog that it is believed to have been exposed to rabies, or hydrophobia; or when the notice or order to quarantine, restrain, confine or muzzle dogs, has been published in each of two papers in each of the counties within which the regulation is established, and when printed notices, giving the text of the regulation or order, have been posted in public places, in the locality in which the regulation or order applies.

Notice to owner.

Advertisement.

Section 3. Should dogs be permitted to run at large, or to escape from restraint or confinement, or to go without muzzles, in violation of the quarantine, or regulation, or order, established by the State Live Stock Sanitary Board to restrict the spread of rabies, or hydrophobia, as provided by this act, such dogs may be ~~seized and confined~~, or they may be shot or otherwise

When dogs may
be shot, etc.

destroyed, and the owner or owners thereof shall have no claim against the person so doing.

Misdemeanor. Section 4. Any person violating the provisions of this act, or of a quarantine, or of a regulation or order to restrain, confine or muzzle dogs, duly established by the State Live Stock Sanitary Board, for the purpose of restricting the spread of rabies, or hyrophobia, in the manner provided in the other sections of this act, shall be deemed guilty of a misdemeanor; and upon conviction shall forfeit and pay a fine of not less than ten dollars nor more than one hundred dollars, at the discretion of the court.

Fine and penalty.

Approved—The 27th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 87.

A SUPPLEMENT

To an act, entitled "An act regulating the construction, maintenance, alteration and inspection of buildings and party walls in cities of the second class," approved the 7th day of June, A. D. 1895; regulating the construction, alteration and ventilation of tenement-houses, and providing for the safety of the inhabitants thereof; and providing penalties for the violation of the same.

Tenement-houses. Section 1. Be it enacted, &c., That no tenement-house shall hereafter be erected, altered or constructed in any city of the second class, unless such erection, alteration or construction shall be in conformity with the provisions of this act.

Cities of the second class.

Section 2. Certain words used in this act shall be defined, for the purposes thereof, as follows:

"Tenement-house" defined. "Tenement-house" is any house or building, or portion thereof, which is intended or designed to be occupied or leased for occupation, or actually occupied as a home or residence for three or more families, living in separate apartments, and doing their cooking upon the premises.

"Apartment" defined. "Apartment" is a room or suite of two or more rooms, occupied or leased for occupation, or intended or designed to be occupied, as a family domicile.

Section 3. Every tenement-house hereafter erected, altered or constructed, in any city of the second class, shall have attached to it, in the rear or at the side, an open space, equal in area to at least twenty per centum of the entire area of the lot upon which said tenement-house is erected, which open space shall be unobstructed by any overhanging structure, except fire-escapes required by law; unless, however, such tenement-house shall be erected upon a corner of two streets neither of which is less than twenty feet in width, in which case said tenement-house shall have an open space attached to it, in the rear or at the side next the adjoining lot, equal in area to at least ten per centum of the entire area of the lot upon which said tenement-house is erected, which open space shall be unobstructed by any overhanging structure, except fire escapes required by law; and any such tenement-house which shall be erected upon a lot bounded on three sides by streets not less than twenty-feet in width, may be erected to cover the entire area of said lot, provided that every window opening from the living rooms in said tenement-house, shall open upon one of said streets. Such open space, attached to every such tenement-house, shall be at least eight feet in width throughout its entire length. No court or open space between tenement-houses, or between wings of a tenement-house, shall be of a less width than ten feet. If such tenement-houses shall be built upon a lot which is bounded upon two opposite sides by streets, then at least one end of every such open space shall abut upon one of such streets. Every court or shaft which shall be built for the purpose of furnishing light or air to any such tenement-house shall open upon one side into a street or into the yard or open space, except such shafts as may be necessary for the ventilation of water-closets or bath-rooms.

Open space or area.

When erected on a corner.

When bounded on three sides by streets.

Dimensions of open space.

Light or air shafts and courts.

Section 4. Every room, in every such tenement-house, shall have at least one window, opening upon a street, or upon the open space provided for in the third section of this act. And the distance from every window, in every such tenement-house, to the wall or party line opposite to it, shall be at least eight feet. The halls on each floor of every such tenement-house shall have a window or windows, opening either upon a street, or upon the open space provided for in the

Windows.

Halls.

third section of this act, and shall have no room or other obstruction at the end, unless sufficient light and ventilation is otherwise provided for said halls, in a manner approved by the superintendent of the bureau of building inspection. But whenever, in the judgment of the superintendent of the bureau of building inspection, it shall be possible to construct such tenement-house without corridors connecting the entrance of several tenements or suites of rooms, the superintendent of the bureau of building inspection may require that such tenement-house be so constructed that it shall contain no such corridors.

Corridors.

Section 5. Every habitable room, in every such tenement-house, shall be of such dimensions as to contain at least seven hundred cubic feet of air. Every habitable room, in every such tenement-house, shall be in every part not less than eight feet in height, from floor to ceiling: Provided, That an attic-room need be eight feet in but one-half its area; and every window shall have an opening of not less than one-tenth of the floor area of the room, but the bureau of building inspection may permit windows of less size, if more than one window is provided for a room, so that, however, the total window space for any one room shall not be less than one-tenth the floor area of the room.

Dimensions of habitable rooms.

Proviso.

Basement-rooms.

Section 6. Every tenement-house basement-room hereafter constructed, for living purposes, and every basement-room in already existing buildings, which shall be converted into a living-room, shall have the ceiling at least eight feet six inches in every part from the floor, and shall be at least one-half its height above the level of the street or ground outside of or adjoining the same; where the grade of the street or ground adjacent to a tenement-house varies, the mean, or average, grade shall be taken to conform to the provisions of this act. Such room shall have a window or windows, opening upon the street or upon a yard or court. The total area of the windows in such room shall be at least one-eighth of the floor area of the room, and one-half of the sash shall be made to open the full width, and the top of each window shall be within six inches of the ceiling. There shall be appurtenant to every such room or apartment a water-closet, conforming in design, materials and construc-

Ceilings.

Grade.

Windows.

Water-closet.

tion to the building and health regulations of cities of the second class.

Section 7. Every new tenement-house shall have all walls, below the ground level, and all cellar or lower floors, made damp-proof and water-proof. Such damp-proofing and water-proofing shall run through the walls, and up the same as high as the ground level, and shall be continued throughout the floor; and the said cellar or lowest floor shall be properly constructed, so as to prevent water and dampness from entering.

Damp and water-proofing.

Section 8. All stairways in such tenement-houses shall lead directly to the ground floor. The location and construction of all stairways shall be determined by the superintendent of the bureau of building inspection, so as to provide for the safety of the occupants of such tenement-houses.

Stairways.

Section 9. All tenement-houses shall be provided with a suitable number of outside fire-escapes, in conformity with the requirements and regulations relative to fire escapes already in force in this Commonwealth.

Fire-escapes.

Section 10. All stairways shall have a rise of not over eight inches to a step, and not less than nine inches tread, exclusive of the nosing. All stairways and all hallways must be not less than three feet in width, in houses containing less than fifteen rooms; not less than three feet six inches in width, in houses containing not less than fifteen rooms and not more than twenty-five rooms; and not less than four feet in width, in houses containing twenty-five or more rooms.

Construction of stairways and hallways.

Section 11. In every such tenement-house, whenever a connection with a public sewer is in any way possible (and of this possibility the bureau of health of said cities shall be the sole judge), there shall be one water closet for every tenement or suite of rooms, which has its own independent hallway, so separated that its rooms do not open into or connect with any other rooms; and in tenement-houses so constructed that a tenement may consist of a single room or of two rooms, there shall be at least one water-closet for every three rooms: Provided, That in the case of buildings existing at the date of this act, which shall hereafter be altered or converted into tenement-houses, there shall be one water closet for every six

Connection with public sewer.

Water-closets.

Provido.

rooms, but not less than one for each floor. Every water-closet shall be separated from every other water-closet, and shall have an entrance entirely independent of the entrance to every other water-closet. Every such water-closet shall be properly ventilated, in conformity with the regulations and requirements already in force in said cities of the second class. But when necessary (and of this necessity the bureau of health of said cities shall be the sole judge), such water-closets may be located in the yard. Wherever located, the said water-closets shall conform in design, materials and construction to the building and health regulations of said cities.

Connection with
water main.

Sinks.

Section 12. In all tenement-houses hereafter erected, wherever a connection with the city water main is in any way possible (and of this possibility the bureau of health shall be the judge), there shall be an independent water supply, and at least one sink for every tenement or suite of rooms; and in every now existing tenement-house, or house that may be hereafter converted into a tenement-house, there shall be on every floor at least one proper sink, with running water, accessible to all the tenants of that floor without passing through any other apartment, if there be no such sink in each apartment; and the space under all sinks, and also under all bath tubs where such exist, shall be left entirely open, with no woodwork enclosing the same.

Fire-proof.

Section 13. All tenement-houses four or more stories in height, which shall hereafter be erected, altered or constructed, shall be made fire-proof throughout, in conformity with the fire-proof ordinances now in force in said cities.

Plans and speci-
fications to be
filed.

Permit.

Violations.

Section 14. The superintendent of the bureau of building inspection shall require such plans and specifications of any proposed erections, alterations or constructions of tenement-houses, as sufficiently set forth and record the intent of the builder to comply with the requirements of this act, to be filed with him; and no permit for the erection or construction or alteration of any such tenement-house shall be granted, unless the same shall be in conformity with the provisions of this act.

Section 15. Any violations of any of the provisions of this act shall subject the person or persons, so of-

fending, to a fine or penalty of not less than ten dollars nor more than one hundred dollars; and any such violation of the provisions of this act, if continued after the first fine is imposed therefor, shall, for every week of such continuance, be punishable by an additional fine of not less than ten dollars nor more than one hundred dollars. All such fines and penalties shall be recoverable by summary proceedings before the recorder, mayor or any alderman or police magistrate, in any of said cities; and all suits or actions at law, instituted for the recovery thereof, shall be in the name and for the use of the city within or against which the offense is committed, and upon the recovery thereof all such fines and penalties shall be paid to the city treasury thereof. In default of the payment of any fine or penalty imposed by any such authority, the person or persons so offending may be committed to the jail, workhouse or other penal institution of the county in which said city is situated, for a period not exceeding thirty days.

Fine and penalty.

How recoverable.

Commitment.

Section 16. Whenever any owner or builder shall deem himself aggrieved by any decision of the superintendent of building inspection, made in performance of the powers conferred upon him by this act, such owner or builder shall be entitled to an appeal from such decision, as provided by section five of the act to which this is a supplement.

Appeal.

Section 17. Whenever any of such cities shall have incurred expense in enforcing any of the provisions of this act, imposing duties upon persons or corporations, such cities shall have the right to recover the same, by action of assumpsit, from the owners or occupants of the premises, or other persons or corporations failing or refusing to comply with or execute the same.

City's right of recovery.

Approved—The 30th day of March, A. D. 1903.

SAML. W. PENNYPACKER.

No. 100.

AN ACT

To amend section twenty of an act, entitled "An act to provide for the more effective protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895.

Membership of
boards of health.

Section 1. Be it enacted, &c., That section twenty of an act, entitled "An act to provide for the more effectual protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895, which reads as follows:

Section 20, act of
June 18, 1895,
cited for amend-
ment.

"Section 20. No justice of the peace, or other officer excepting election officers, shall, at the same time, be a member of the board of health of such municipality, or hold any office or appointment under the same," be and the same is hereby amended to read as follows:

Eligibility of
members.

Section 20. No justice of the peace, member of council, or other officers, except school directors, constables, or election officers, shall, at the same time, be a member of the board of health of such municipality, or hold any office or appointment under the same.

Approved—The 3d day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 110.

AN ACT

For the protection of the health of persons addicted to the smoking of cigarettes, and imposing a fine for the violation of its provisions.

Preamble.

Whereas, The smoking of cigarettes is injurious to the health of the young; therefore,

Sale of cigarettes
or cigarette
paper.

Section 1. Be it enacted, &c., That if any person or persons shall sell cigarettes or cigarette paper to any person, or persons, under the age of twenty-one years, he or she so offending shall be guilty of a misdemeanor, and upon conviction thereof shall be sen-

Misdemeanor.

tenced to pay a fine of not more than three hundred ^{Fine.} dollars, nor less than one hundred dollars.

Approved—The 4th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 112.

AN ACT

Entitled a supplement to an act to provide for the better government of cities of the first class in this Commonwealth; amending articles two, three, ten and twelve; and providing for a department of public health and charities, in lieu of the department of charities and correction.

Section 1. Be it enacted, &c., That so much of section one, article two, of the act, entitled "An act to provide for the better government of cities of the first class of this Commonwealth," approved the first day of June, A. D. 1885, which reads as follows: ^{Cities of the first class.}

"Section 1. There shall be the following executive departments: ^{Section 1, Article II, act of June 1, 1885, cited for amendment.}

- I. Department of public safety.
- II. Department of public works.
- III. Department of receiver of taxes.
- IV. Department of city treasurer.
- V. Department of city controller.
- VI. Department of law.
- VII. Department of education.
- VIII. Department of charities and correction.
- IX. Sinking fund commission,"

shall be amended to read as follows:

Section 1. There shall be the following executive departments: ^{Executive departments.}

- I. Department of public safety.
- II. Department of public works.
- III. Department of receiver of taxes.
- IV. Department of city treasurer.
- V. Department of city controller.
- VI. Department of law.
- VII. Department of education.
- VIII. Department of public health and charities.
- IX. Sinking fund commission.

Section 2. That section one, article ten, of the said act, which reads as follows:

Section 1, Article X, act of June 1, 1885, cited for amendment.

"Section 1. The department of charities and correction shall be under the charge of a president who shall be the head thereof, and four directors, to which department shall be confided the care, management, administration and supervision of the charities, almshouses, hospitals, houses of correction, and all other similar institutions, the control or government of which is intrusted to the city," shall be amended to read as follows:

Department of Public Health and Charities.

Section 1. The department of public health and charities shall be under the charge of a director, and an assistant director whom he shall appoint, to which department shall be confided the care, management, administration, and supervision of the public health, charities, almshouses, hospitals, and all other similar institutions the control or government of which is intrusted to the city.

Section 3. That so much of section one, article three, of said act which reads as follows:

Part of Section 1, Article III, act of June 1, 1885, cited for amendment.

"Section 1. The department of public safety shall be under the charge of one director who shall be the head thereof.

The care, management, administration and supervision of the police affairs, and all matters relating to the public health, to the fire and police force, fire alarm telegraph, erection of fire-escapes, and the inspection of buildings and boilers, markets and food sold therein, shall be in charge of this department," shall be amended to read as follows:

The Department of Public Safety.

Section 1. The department of public safety shall be under the charge of one director, who shall be the head thereof.

The care, management, administration, and supervision of the police affairs, and all matters relating to the fire and police force, fire alarm telegraph, erection of fire-escapes, and the inspection of buildings and boilers, markets and food sold therein, and the house of correction, shall be in charge of this department.

Part of Section 1, Article III, act of June 1, 1885, cited for amendment.

Section 4. That so much of section one of article three, which reads as follows:

"Section 1. The director of public safety shall ex-officio be a member and president of the board of health, and as chief executive officer thereof, subject

to the resolutions and orders of said board, appoint, supervise and control all the subordinate officers and employes attached to the board," shall be amended to read as follows:

Section 1. The Director of Public Health and Charities, as chief executive officer thereof, shall appoint, supervise, and control all the subordinate officers and employes attached to the department, and shall appoint all vaccine physicians and health inspectors; and all hospitals belonging to the municipality, where provision is made for the care of contagious diseases, shall be under the immediate supervision and control of the Director of Public Health and Charities.

Powers of the Director.

Section 5. That part three of section one, of article twelve of said act, which reads as follows:

"III. The president and directors of the department of charities and correction shall also be appointed by the mayor, but their term of office shall be five years from the date of their appointment if they shall so long behave themselves well," shall be amended to read as follows:

Part III, Section I, Article XII, act of June 1, 1885, cited for amendment.

III. The Director of the Department of Public Health and Charities shall also be appointed by the Mayor, but his term of office shall be four years from the date of his appointment, if he shall so long behave himself well.

Term of office.

All acts or parts of acts inconsistent herewith are hereby repealed.

Repeal.

Approved—The 8th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 132.

AN ACT

To protect the public health, and prevent the spread of infectious and contagious diseases in this Commonwealth.

Whereas, Infectious and contagious diseases are very largely disseminated through the agency of the schools, from the want of proper disinfection of school buildings; therefore,

Whereas.

Section 1. Be it enacted, &c., That on and after the

Cites.

Duty of school directors, etc.

passage of this act, it shall be the duty of the board of school directors, trustees, or other person or persons having control of any school or college building, in any city of this Commonwealth, to adopt and immediately put into operation a modern method and system of disinfection, for the disinfection of such school or college buildings.

Disinfection.

At regular intervals.

Section 2. And it shall further be the duty of such board of school directors, trustees, or other person or persons having control of any school or college building in any city of this Commonwealth, at regular intervals of not exceeding two weeks, to cause all of the school or college buildings under their control to be thoroughly disinfected, by means of the method and system which they may adopt in compliance with section one of this act.

Approval of method by board of health.

Section 3. Whenever there exists in any city a local board of health for such city, the method and system of disinfection adopted by the board of school directors, trustees, or other person or persons having control of any school or college building in such city, shall be approved by such local board of health; in any city where no such local board of health exists, such method and system of disinfection, as aforesaid, shall be approved by the State Board of Health of this State.

Not to interfere with school sessions.

Section 4. In operating such methods and system of disinfection, as aforesaid, the person or persons in charge of such duty shall, as far as practicable, perform such duty in such manner as not to interfere with the regular school sessions held in said school or college buildings, and it shall not be necessary, under this act, to perform such duty in any school or college building which is not used and occupied for school purposes.

Portion of appropriation for expenses.

Section 5. In order to fully and completely carry out the provisions of this act, and to defray the expenses necessary to equip and put into operation by the board of school directors, trustees, or other person or persons having control of any public or high school of this State, such method and system of disinfection, as aforesaid, there shall be set aside by such school directors, trustees, or other person or persons having control of any public or high school building, out of the funds biannually appropriated by this State, under the act "providing method of distributing the appro-

priation to common schools," sufficient money, necessary to defray the expenses incident thereto.

Section 6. Any board of school directors, trustees, or other person or persons, charged under this act with the enforcement of any of its provisions, who shall neglect to properly enforce the same shall, upon complaint of State or local board of health to the court of common pleas of the proper county, pay a fine of not less than five dollars nor more than one hundred dollars.

Neglect.

Fine.

Section 7. All acts or parts of acts inconsistent with this act are hereby repealed.

Repeal.

Approved—The 14th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 142.

AN ACT

To prohibit the discharge of flobert rifles, air guns, spring guns, in cities and boroughs of this Commonwealth.

Section 1. Be it enacted, &c., That six months after the passage of this act it shall be unlawful for any person to discharge, on the streets or alleys, of any city or borough in this Commonwealth, a flobert rifle, air gun, spring gun, or any implement which impels with force a metal pellet of any kind.

Flobert rifles, air guns and spring guns.

Unlawful to discharge in streets or alleys.

Section 2. Any person violating this act shall be arrested, and fined in the sum of five dollars before any committing magistrate; and for the second offense, shall be fined in the sum of fifteen dollars, and may undergo an imprisonment in the county jail for a period not less than ten days and not exceeding thirty days, the person so offending to pay all costs of prosecution.

Fine.

Approved—The 15th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 179.

AN ACT

To amend the twenty-first section of an act, entitled "An act to provide for the more effectual protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895; limiting the time in which actions may be brought for the recovery of fines or penalties under said act.

Section 1. Be it enacted, &c., That section twenty-one of the act, entitled "An act to provide for the more effectual protection of the public health in the several municipalities of this Commonwealth," approved the 18th day of June, A. D. 1895, which reads as follows:

Section 21, act of June 18, 1895, cited for amendment.

"Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton, janitor, head of a family, or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate, any of the provisions or requirements of this act, shall, for every such offense, upon conviction thereof before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offense was committed, be liable to a fine or penalty therefor of not less than five dollars nor more than one hundred dollars; which said fines or penalties shall be paid into the treasury of said municipality; and in default of payment thereof, such person or persons, so convicted, shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days," be and the same is hereby amended so as to read as follows:

Fines and penalties.

Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton, janitor, head of a family, or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate, any of the provisions or requirements of this act, shall, for every such offense, upon conviction thereof before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offense was committed, be liable to a fine or penalty therefor

of not less than five dollars nor more than one hundred dollars; which said fines or penalties shall be paid into the treasury of said municipality; and in default of payment thereof, such person or persons, so convicted, shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days: Provided, however, That all actions for the recovery of any fine or penalty for the violation of any of the provisions of this act, shall be commenced within sixty days from the commission of the offence, and not afterwards.

To be paid into treasury of municipality.

Proviso.

Actions shall be commenced within 60 days of offense.

Approved—The 22d day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 192.

AN ACT

Regulating the sale or prescription of cocaine, or of any patent or proprietary remedy containing cocaine and prescribing penalties for the violation thereof.

Section 1. Be it enacted, &c., That no person shall sell, furnish or give away any cocaine, or any patent or proprietary remedy containing cocaine, except upon the prescription of a registered practicing physician, or of a dentist, or of a veterinarian; nor shall any such prescription be refilled; nor shall any physician, dentist or veterinarian prescribe cocaine, or any patent or proprietary remedy containing cocaine, for any person known to such physician, dentist or veterinarian to be an habitual user of cocaine: Provided, That the provisions of this act shall not apply to persons engaged in the wholesale drug trade, regularly selling cocaine to persons engaged in the retail drug trade.

Cocaine.

Sale or prescription of, regulated.

Proviso.

Section 2. Any person violating any of the provisions of this act shall be sentenced to pay a fine of not more than one hundred dollars, and undergo an imprisonment of not more than six months, or both, or either, at the discretion of the court.

Violation.

Fine and penalty.

Approved—The 22d day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 236.

AN ACT

To further regulate the construction, maintenance and inspection of buildings and party walls, in cities of the first class.

Cities of the first class.

Section 1. Be it enacted, &c., That all buildings hereafter erected or altered, in cities of the first class, shall be classified as follows:

Buildings of the first class.

Buildings of the first class shall include all buildings in which the walls, floors, columns, girders, beams, partitions, and roofs are of stone, brick, terra-cotta, concrete, steel, iron or such other fire proof materials as shall be approved by the Bureau of Building Inspection.

Buildings of the second class.

Buildings of the second class shall include all buildings the walls of which are as hereinbefore specified columns, beams, and girders are of the construction for buildings of the first class, but in which the floors, known as "slow-burning construction," in which all columns and girders shall be of wood, and in which no column shall be of less dimension than sixty-four square inches, and no girder or floor-beams less than six inches in its least dimension. The flooring to be of plank not less than two and three-quarters inches thick, when dressed, and the roof of plank not less than one and three-quarters inches thick, when dressed: Provided, That in such buildings, iron or steel may be used for beams, columns or girders, if the same be protected with fire-proofing materials, as hereinafter set forth for buildings of the first class.

Buildings of the third class.

Buildings of the third class shall include all buildings the walls of which are as hereinbefore specified for buildings of the first class, but which in their interior construction are not in accordance with the requirements as hereinbefore set forth for buildings of the first and second class, or the floors of which may be of ordinary house or joist construction.

Buildings of the fourth class.

Buildings of the fourth class shall include all buildings, other than those of the character specified for first, second and third class construction.

Buildings which shall be of the first class.

Section 2. Any building hereafter erected or altered, to be used as a hospital, asylum, or institution for the care or treatment of persons, the height of which exceeds two stories, and every building here-

after erected or altered, to be used as an apartment-house, tenement-house, flat-house, lodging-house, hotel, school, or police station, the height of which exceeds four stories, shall be a building of the first class; and no building of any kind, except as hereafter provided, shall be erected or raised to a height exceeding sixty-five feet, except the same be a building of the first or second class; and no building shall be erected or raised to a height exceeding eighty-five feet, except the same be a building of the first class; and all buildings of a height exceeding six stories shall be buildings of the first class.

Limits of height.

All buildings of the first class hereafter erected or altered, to be used for warehouse, store or factory purposes, shall be so divided by fire-proof walls or partitions on every floor, except as hereinafter provided, that no space on any floor, not so divided, shall exceed twenty-five thousand square feet; and no existing wall or partition, in any of such building, shall be removed so as to leave a space, not so divided, of more than twenty-five thousand square feet. Such walls or partitions shall extend from the fire-proof construction of the floors to the fire-proof beam filling of the ceilings. The openings or doorways in any such walls or partitions shall not exceed three in number for each floor, for each such wall or partition, and no such opening shall exceed ten feet in height or ten feet in width. Each opening must be provided with two sets of standard fire-doors, separated by the thickness of the wall or partition, said doors to be constructed and hung as provided elsewhere in this act. All of the said openings through partitions of fire-proof material shall have metal frames or studs, securely fastened to floor and ceiling, and such metal studs shall be covered with such fire resisting materials as shall be approved by the Bureau of Building Inspection. No wood for framing or fastening shall be used for such openings: Provided, however, That the space, or spaces, of the first or grade floor of any such buildings, may exceed twenty-five thousand square feet, when the entire building is under the protection of an approved system of automatic sprinklers, so long as such system shall be kept and maintained in complete working order. If such system shall not be maintained and

Warehouse, store or factory.

Fire-proof walls or partitions.

Openings in.

Fire doors.

When protected by automatic sprinklers.

er, it shall be the

duty of the Bureau of Building Inspection to give written notice to the tenants or owners, served upon the premises, of said fact, and within sixty days thereafter the division by fire-proof walls or partitions, as above provided, shall be made, and thereafter maintained.

Beams, girders, etc., to be protected by fire-proofing.

Thickness of.

How bedded.

What shall be deemed a fire-proof building.

The filling.

Test.

Where wood may be used.

Interior columns, etc.

No building shall be deemed a building of the first class unless the enclosing or division walls are wholly or in part supported on iron or steel beams, girders and columns, such beams, girders and columns shall be protected against the external changes of the atmosphere and against fire by a covering of brick, terracotta, fire-clay, tile, or other approved fire-proofing, completely enveloping said structural members of iron or steel. Said fire-proofing around outside columns and beams, if of brick, shall not be less than eight inches; if of hollow tile, shall not be less than six inches thick, and there shall be at least two sets of air spaces between the iron and steel members and the outside of the hollow tile covering. In all cases the brick or hollow tile shall be bedded in cement mortar close up to the iron or steel members, and all joints shall be made full and solid. No buildings shall be deemed a fire-proof building unless, in addition to the above required covering of the iron and steel members, all the interior columns, beams and girders be enveloped in such fire-resisting materials as shall be approved by the Bureau of Building Inspection. The filling between the individual floor beams and girders shall be one of the fire-proof systems in use, as approved by the Bureau of Building Inspection, and must in every case have stood the test of three times the load for which the floor is designed, without sign or cracking. No wood or other inflammable material shall be used in any part of any such building except the doors and windows and their frames, the trims, the casings, the interior finish, when filled at the back with fire-proof materials; and the floor boards and sleepers directly under the spaces between and under the sleepers must be filled up and leveled off at the top of the said sleepers with concrete or other incombustible material. All interior columns, and the lower flanges of all girders of iron or steel, shall be protected with at least three inches of brick, terracotta, concrete, or other fire-resisting materials, as

shall be approved by the Bureau of Building Inspection. The web of all girders, and the flanges and web of all beams, to be protected by not less than two inches of terra-cotta brick, concrete, or other fire-proof material; but the extreme outer edge of lugs, brackets, and similar supporting metal, may project within one inch of the surface of the fire-proofing. Where the bases of iron or steel columns are independent, the said bases shall be either cast-steel, thoroughly annealed, or built-steel bolsters. Built sections of girders or columns, in which all parts are not accessible after erection, shall be filled with concrete, in the proportion of one part of Portland cement to three parts of sand and five parts of stone, to pass a three-fourths of an inch mesh. The maximum span for arches of brick, terra-cotta, concrete, or other patent floors, shall not exceed eight feet; but nothing herein contained shall prohibit the use of reinforced concrete or heterogenous systems, provided the depth of the floor beams or girders is three-fifths of an inch per foot of span, and that a test for strength, and fire and water resistance, satisfactory to the Bureau of Building Inspection, shall be given for said reinforced or heterogenous system. No arch in any floor system shall have a rise of less than one and one-quarter inch per foot of span.

Fire-proofing.

Bases of columns.

Portland cement.

Span or arches.

Concrete or heterogenous system.

In buildings of the first class, all pipes, conduits, mains, wiring, and conveyances for conducting heat, light or water, shall be encased in separate fire-proof ducts, and shall not be enclosed in the fire-proofing surrounding any column, girder or beam of steel or iron.

Pipes, conduits, etc.

Provided, also, That this section shall not apply to one-story buildings, used only for working in non-combustible materials, and that nothing contained in this section shall prevent the erection of grain elevators, church spires, towers for observation purposes, and structures for similar uses, all of which structures shall be constructed in such manner and under such conditions as may be prescribed by the Bureau of Building Inspection.

Grain elevators, spires, towers, etc.

Section 3. Buildings of the second class, in which any floor area between exterior walls exceeds fifteen thousand square feet, and buildings of the third class in which any floor area between exterior walls exceeds

Floor areas.

Divided by walls
of fire-resisting
material.

five thousand square feet, shall be so divided by walls of bricks, stone, concrete, or such other fire-resisting material as shall be approved by the Bureau of Building Inspection, that no space inside such building shall exceed fifteen thousand or five thousand square feet, respectively, as hereinbefore set forth; the said walls to be of the thickness as now required by law, and shall extend through, and at least three feet above, the roof. No existing wall in any buildings of the second or third class shall be removed, so as to leave a space inside any building which shall exceed the areas hereinbefore set forth for each class.

Proviso.

Provided, however, That in buildings of the third class, the floor area may be seventy-five hundred square feet, if the floors and roof be made of plank not less than one and three-quarters inches thick, when dressed.

Openings in division walls.

Openings may be made in such division walls, of the size, number and character as provided in section two for buildings of the first class, if protected by standard fire-doors as provided in that section.

Proviso.

Provided further, That this section shall not apply to private dwellings, nor to one-story buildings used only for working in non-combustible materials.

Skeleton wall construction.

In buildings other than buildings of the first class, skeleton wall construction shall not be permitted.

Party walls.

All party walls in buildings of the first, second and third class, except dwellings and buildings of similar light construction, shall extend through, and at least three feet above, the roof.

Stairways.

Section 4. All stairways hereafter placed in any buildings of the first, second or third class, used for warehouse, store or factory purposes, and in which any floor area between exterior walls exceeds five thousand square feet, and all elevators, hoistways, hatchways, well-holes, chutes, dumb-waiters and interior light or vent shafts, or shafts of any description, hereafter placed in any building, except such fire-proof buildings as are occupied for office purposes only, shall be enclosed, between floors and ceilings of each story, in suitable walls of brick, or with a suitable framework of iron and burnt clay filling, or of such other fire-proof material and form of construction as may be approved by the Bureau of Building Inspection, except that the enclosure walls, required by this section,

Warehouse, store,
or factory.

Elevators, chutes,
shafts, etc.

Enclosure walls.

in any non-fire-proof buildings, used as warehouses or factories, shall be of brick. All such walls or construction, where the elevator, stairs, hoist, hatchway, chute, dumb-waiter, light or vent shaft, or other shaft, extends to the top floor, shall extend through, and at least three feet above, the roof. If the enclosure walls are of brick, any of the above shafts may be in the same enclosure, provided the stairways are constructed of non-combustible material. All interior openings in the enclosure walls of elevators, stairways, hoistways, hatchways, chutes and dumb waiters, shall be provided with fire-proof doors, made solid for their full height, and set in fire-proof frames and fittings. Lights of wire-glass, in metal frames, may be placed in such doors and in the enclosure walls, but no one pane of wire-glass shall exceed in area two hundred and fifty square inches, between muntins. All exterior openings in the enclosure walls of stairways, elevators or dumb waiters, and all openings in the walls of interior light or vent shafts, shall be provided with approved wire-glass windows, set in approved metal frames, but no one pane of wire-glass in such windows shall be larger than twenty-four inches by thirty inches, between muntins. Automatic closing trap-doors, tin lined on the under side, at each floor, when approved by the Bureau of Building Inspection, may be substituted for the above named enclosure walls for hoistways (without cars), hatchways and chutes.

Interior openings
in walls.

Lights of wire-
glass.

Trap-doors.

The roofs over the enclosed elevators, stairways, hoistways, hatchways, chutes and dumb waiters, shall be made of fire-proof materials, with a skylight or side-lights above the roof, at least three-quarters the area of the shaft, made of glass set in iron frames. When the shafts do not extend to the ground, the bottom floor of the shaft shall be constructed of fire-proof material. In all buildings of the first, second or third class, in which any floor area between exterior walls is five thousand square feet or less, the stairways shall be of such number, and protected in such manner, as may be approved by the Bureau of Building Inspection.

Roofs over eleva-
tors, etc.

Bottom floor of
shafts.

In any building now existing, in which there is an elevator, dumb-waiter, interior light or vent shaft, hoistway, hatchway, chute, well-hole, or shaft of any

Elevators, shafts,
chutes, etc.

Guard, gates, or trap-doors,	description, not enclosed in walls constructed and arranged as required in this act, the openings thereof, through and upon each floor of said building, shall be provided with and protected by a substantial guard or vertical enclosure, and gate or gates, or with such good and sufficient trap-doors, or both, as may be directed and approved by the Bureau of Building Inspection. Such guards or enclosure gates shall be
To be closed when not in use.	kept closed at all times when not in actual use, and trap-doors shall be closed at the close of the business of each day, by the occupant or occupants of the building having the use or control of the same. When in the opinion of the Chief of the Bureau of Building Inspection automatic closing trap-doors are required for any such floor openings, the same shall be tin-lined on the under side, and constructed so as to form a substantial floor surface, when closed, and so arranged for elevators as to open and close by the action of the elevator in its passage, ascending or descending.
Trap-doors, construction of.	<p>Provided, however, that in every building, now or hereafter used or occupied as a hotel, lodging-house, apartment or tenement-house, store, warehouse or factory, or where a number of persons are employed, or which is used for public assemblage, in which there is any elevator, hoistway, hatchway, well-hole, chute or dumb waiter, enclosed in walls constructed of combustible material, the enclosing walls of such elevators, hoistways, hatchways, well-holes, chutes, and dumb waiters, shall either be lined with metal, securely fastened on the inside of the shaft, or such elevators, hoistways, hatchways, well-holes, chutes and dumb waiters, shall be enclosed in suitable walls, constructed and arranged as required for elevator shafts in this act: Provided, however, That approved automatic closing trap-doors, tin-lined on the under side, and so constructed as to form a substantial floor surface when closed, and so arranged for elevators as to open and close by the action of the elevator in its passage, either ascending or descending, may be substituted for such metal lining, when in the opinion of the chief of the Bureau of Building Inspection such trap-doors will provide the required protection.</p>
Proviso.	In existing buildings, passenger elevators, enclosed in open grill work, may be erected in staircase enclosures, where the entire space occupied by the stairs and elevators is enclosed in brick or stone walls, or
Enclosing walls of hoistways, hatchways, etc.	
Metal lining.	
Proviso.	
Trap-doors may be substituted.	
Passenger elevators.	

walls of such other fire-proof material and form of construction as may be approved by the Bureau of Building Inspection; provided that, in warehouses, stores, or factories, all openings in the enclosing walls must be provided with fire-proof doors, or wire-glass in metal frames, as provided elsewhere in this section for elevator and stairway enclosures.

Provided, however, That nothing in this section shall apply to any building not over two stories in height, nor to private dwellings and buildings of similar light construction, stores with private dwelling occupancy entirely above the grade floor, and stables.

Proviso.

Section 5. Whenever standard fire-doors or fire-shutters are referred to in this act, they shall be constructed as follows, namely: Not less than two thicknesses of one-inch boards, laid diagonally, and securely fastened together by wrought-iron clinched nails, and covered with I C tin-plates, not exceeding fourteen by twenty inches, joints to be locked one-half inch and nailed under seams, and corners to have mitre-fold (not mitre-joint). Doors and shutters to overlap sides and top of opening four inches, and to close tight against smooth masonry (not wood trimmed) and sill. Sills to be of non-combustible material, resting on and built into brick or stone wall, and extending under and beyond outer surface of door. Doors and shutters to be hung on wrought-iron wall-eyes, or to slide on track of heavy flat-rolled steel. All hardware, such as hinges, hangers, wall-eyes, track-bolts, binders, handles, latches, catches, et cetera, to be of heavy wrought-iron, built in wall, or bolted through wall or door or shutter. All fire-doors and shutters shall be closed at night, and whenever the building is not in actual use; at least one in three shutters, on each floor above the first, being so arranged that it can be opened from both outside and inside.

Standard fire-doors and fire-shutters.

Sills.

To be closed at night and when building is not in actual use.

Section 6. In all buildings hereafter erected or altered to be used for warehouse, store or factory purposes, the walls shall not be furred with wood; nor shall any partition, extending from floor to ceiling, be constructed with wooden studs. In non-fire proof buildings, to be used for warehouse, store or factory purposes, such partitions shall be constructed of some non-combustible material approved by the Bureau of Building Inspection and not less than

Walls not to be furred with wood.

Partitions.

Plastering.

three inches thick, with tongues, and dressed on all sides. If such walls or partitions are to be plastered, the plaster shall be applied directly to the masonry or partition, or over metal lath, without air spaces behind it.

Ceilings.

In all buildings hereafter erected or altered to be used for warehouse, store or factory purposes, the ceilings shall not be furred with wood, nor shall any wooden or combustible material be applied to form a ceiling. If plaster is applied it shall be applied over metal lath.

Tower fire-escapes.

Section 7. All buildings of the first, second and third classes, hereafter erected or altered to be used as school-houses, tenement-houses, apartment-houses, flat-houses, stores, offices, manufactories, workshops, mills or places of assembly or resort, shall have, in addition to the main stairs or other means of egress, a tower fire-escape, or escapes, as set forth in the following schedule:

Schedule.

Buildings of the First Class.

ONE TOWER FIRE-ESCAPE.		TWO TOWER FIRE-ESCAPES.
Number of stories in height.	Maximum area per floor in square feet.	Area per floor in square feet.
3 or 4,	20,000.	Over 20,000 to 25,000.
5,	15,000.	Over 15,000 to 25,000.
6,	12,000.	Over 12,000 to 25,000.
7,	10,000.	Over 10,000 to 22,000.
8,	9,000.	Over 9,000 to 20,000.
9,	8,000.	Over 8,000 to 18,000.
10,	7,500.	Over 7,500 to 17,000.
11,	7,000.	Over 7,000 to 16,000.
12,	6,500.	Over 6,500 to 15,000.

Buildings of the Second and Third Classes.

ONE TOWER FIRE-ESCAPE.		TWO TOWER FIRE-ESCAPES.
Number of stories in height.	Maximum area per floor in square feet.	Area per floor in square feet.
3,	10,000.	Over 10,000 to 15,000.
4,	6,000.	Over 6,000 to 12,000.
5,	4,500.	Over 4,500 to 10,000.
6,	3,500.	Over 3,500 to 8,000.

If the total floor space above the second floor exceeds the number of square feet as set forth in the above schedule, there may be required, in addition

to the above mentioned number of fire-escapes, as many additional tower fire-escapes as the Chief of the Bureau of Building Inspection may determine.

Additional tower fire-escapes.

The location and construction of all stairways and tower fire-escapes shall be determined and approved by the Chief of the Bureau of Building Inspection.

Location and construction of.

Provided, That this section does not apply to office buildings of the first class, nor to buildings less than three-stories high, and buildings of a greater number of stories in height than two, in which the stories above the second story are not occupied by persons: Provided, That in store buildings, in which the tower fire-escapes in the first story would interfere with the bulk windows, the said tower may stop at the second floor level, and that an exterior, continuous balcony be provided at the second floor level, with drop ladders.

Proviso.

Proviso.

All buildings used as stores, department stores, or buildings of any kind in which people assemble in the basement of said stores or buildings, there shall be provided safe means of egress from the basement, leading directly to the street, the proper location of such places of egress to be determined by the Chief of the Bureau of Building Inspection.

Egress from basement.

Section 8. In this act the term "height" of a building, means the vertical distance of the highest point of the roof, in the case of flat roofs; and for high-pitched roofs, the average of the height of the gable above the mean grade of the curbs of all the streets, or the mean grade of the natural ground adjoining the building, if the said grade or ground is not below the grade of the curb.

"Height" defined.

Section 9. So much of all acts or parts of acts conflicting herewith are hereby repealed.

Repeal.

Approved—The 25th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 254.

AN ACT

To prohibit the adulteration of food, and providing for the enforcement thereof.

Food adulteration.

Formaldehyde, etc.

Misdemeanor.

Fine and penalty.

Section 1. Be it enacted, &c., That any person, firm or corporate body who shall, by himself, herself or themselves, or by his, her or their agent or servants, manufacture, sell, ship, consign, offer for sale, expose for sale, or have in possession with intent to sell, any article of food which contains formaline, formaldehyde, sodium fluoride, or any of their compounds, shall be deemed guilty of a misdemeanor; and upon conviction thereof in the court of quarter sessions of the peace of the proper county, shall be sentenced to pay a fine of not less than fifty nor more than one hundred dollars, or to undergo an imprisonment not exceeding sixty days, or both, at the discretion of the court.

Boracic acid, etc.

Misdemeanor.

Fine and penalty.

Proviso.

Section 2. That any person, firm or corporate body who shall, by himself, herself or themselves, or by his, her or their agent or servants, manufacture, sell, ship, consign, offer for sale, expose for sale, or have in possession with intent to sell, any article of food which contains more than one-half of one per centum of boracic acid, boracic acid salt, or any boron compound expressed in terms of boracic acid, shall be deemed guilty of a misdemeanor; and upon conviction thereof in the court of quarter sessions of the peace of the proper county, shall be sentenced to pay a fine of not less than fifty nor more than one hundred dollars, or to undergo an imprisonment not exceeding sixty days, or both, at the discretion of the court: Provided, however, That nothing in this section contained shall, in any way, alter or affect existing laws regulating the sale of milk or cream or butter.

Coloring matter.

Misdemeanor.

Section 3. Any person, firm or corporate body who shall, by himself, herself or themselves, or by his, her or their agents or servants, manufacture, sell, ship, consign, offer for sale, expose for sale, or have in possession with intent to sell, any article of vegetable food containing any coloring matter yielding on analysis more than one-fiftieth of one per centum of metallic copper, shall be deemed guilty of a misdemeanor; and upon conviction thereof in the court of quarter

sessions of the proper county, shall be sentenced to pay a fine of not less than fifty dollars nor more than one hundred dollars, or be imprisoned in the jail of the county for not exceeding sixty days or both, at the discretion of the court. Fine and penalty.

Section 4. It shall be the duty of the Dairy and Food Commissioner to enforce the provisions of this act, for which purpose he shall have the same power which is given him to enforce the provisions of the act authorizing his appointment. Duty of Commissioner.

Section 5. All penalties or fines which may be recovered in any proceeding to enforce the provisions of this act shall be paid to the Dairy and Food Commissioner or his agent, and by him paid into the State Treasury; and the money so paid shall constitute a special fund, for the use of the Department of Agriculture in enforcing this act, and may be drawn out upon warrants signed by the Secretary of Agriculture and approved by the Auditor General. Special fund.

Approved—The 27th day of April, A. D. 1903.

SAML. W. PENNYPACKER.

No. 313.

AN ACT

To provide for the current expenses of the State Board of Health and Vital Statistics, for the two fiscal years commencing the first day of June, one thousand nine hundred and three.

Section 1. Be it enacted, &c., That the following sums, or so much thereof as may be necessary, be and the same are hereby specifically appropriated to defray the expenses of the State Board of Health and Vital Statistics, for the two fiscal years commencing the first day of June, one thousand nine hundred and three: Appropriation.

For the employment of 1 office of the B charges, incident necessary expenses the Board, -	necessary clerical aid in the as, express and other ary of the	Current expenses.
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Board, and for sanitary inspections, abatement of nuisances, and scientific investigations, for the two years, the sum of nine thousand dollars, or so much thereof as may be necessary.

For the payment of the salary of the secretary and executive officer for the two years the sum of four thousand dollars, or so much thereof as may be necessary.

The amounts expended from the above appropriation shall be distributed by the Board in accordance with the requirements of the sanitary service of the Commonwealth.

Said appropriations to be paid upon the warrant of the Auditor General on settlement made by him and the State Treasurer upon specifically itemized vouchers certified to by the president and secretary of said Board, and all moneys appropriated under this act remaining unexpended at the close of the two fiscal years shall revert to the State Treasury.

Approved—The 15th day of May, A. D. 1903.

SAML. W. PENNYPACKER.

No. 395.

AN ACT

To establish an emergency fund, to be used, as occasion may require, the suppression of epidemics, the prevention of diseases and protection of human life in times of epidemic disease or disaster threatening disease, and making an appropriation therefor.

Emergency fund.

Appropriation.

Section 1. Be it enacted, &c., That the sum of fifty thousand dollars be and the same is hereby specifically appropriated and set apart, out of any money in the treasury not otherwise appropriated, for the purpose of creating an emergency fund, to be used, as occasion may require, by the State Board of Health in the suppression of epidemics, prevention of disease, and protection of human life in times of epidemic disease or of disaster threatening disease, beyond the ability of the local authorities to check or relieve.

The money herein appropriated shall be held in the Treasury of the Commonwealth, and whenever the Secretary of the State Board of Health shall find that the public health is threatened, either by epidemic or as a result of great disaster, to such an extent that the local authorities are unable to meet the emergency, he shall prepare a statement to that effect, rehearsing all the facts in the case, and the reason for considering that State aid is needed, and to what amount, and transmit the same to the Governor. If the statement and the reasons therein set forth shall meet with the approval of the Governor, he shall so certify, and file the statement and certificate of approval in the office of the Auditor General, who shall then draw his warrant upon the State Treasurer for the amount approved by the Governor, and place the same in the hands of the treasurer of the State Board of Health, to be used for the purpose set forth in the statement approved as aforesaid, and for no other purpose. If, after the said epidemic shall have been suppressed, or the sickness or danger averted, there shall still be a balance of the amount drawn left in the hands of the treasurer of the State Board of Health, he shall, without delay, return the same to the State Treasurer, and it shall become a part of the said emergency fund. He shall also file with the Auditor General a specifically itemized statement, made under oath, of the expenditures of said moneys as soon as possible.

When money is needed Board of Health shall transmit resolution to the Governor.

Approval of the Governor.

Warrant.

Unexpended balances.

Itemized statement.

Approved—The 15th day of May, A. D. 1903.

SAML. W. PENNYPACKER.

No. 430.

AN ACT.

Making an appropriation for the erection and fitting of a sanatorium, and for the maintenance thereof, on the State Forestry Reservation at Mont Alto, in Franklin or Adams counties, and authorizing the Commissioner of Forestry to make and enforce rules and regulations governing the same.

Sanatorium.

Consumption.

Section 1. Be it enacted, &c., That immediately after the passage of this act, the Commissioner of Forestry shall select a suitable site for the erection of a sanatorium for poor consumptives, within the bounds of the State Forestry Reservation, located near Mont Alto, Franklin county. He shall have authority to select and decide upon a design for said sanatorium, and the material out of which it shall be constructed, and shall have full power to make contracts for its construction; but he shall make no contracts in excess of the appropriation herein named: The total cost of the said sanatorium, and its maintenance for the two fiscal years beginning June first, one thousand nine hundred and three, shall not exceed the sum of eight thousand dollars.

Appropriated

Section 2. For the purpose of carrying out the provisions of this act the sum of eight thousand dollars is hereby specifically appropriated, out of any moneys in the State Treasury not otherwise appropriated; the said appropriation to be paid by the State Treasurer upon warrants drawn by the Auditor General, from time to time as the work progresses, upon specifically itemized vouchers, approved by the Commissioner of Forestry and the Governor.

Under control
Commission of
Forestry.

Section 3. That after the completion of said sanatorium, the same shall be under the control and management of the Commissioner of Forestry, who is hereby empowered to take control of said sanatorium and make and enforce such rules and regulations, in relation thereto and the use thereof, as in his judgment shall be deemed best and proper.

Approved—The 15th day of May, A. D. 1903.

SAML. W. PENNYPACKER.

APPENDIX N.

ADDITIONS TO LIBRARY.

List of Books Received from November, 1902, to November, 1903, by
Gift or Exchange.

How may the Topics in Examination of License be best Arranged
by Examining Boards? Dr. Henry Beates, Jr.

Should the So-called Fundamental Branches in the Study of Den-
tistry and Medicine be Taught by the same Faculty? Dr. Henry
Beates, Jr.

How Should the Practice of Medicine be Legally Defined? Dr.
Henry Beates, Jr.

Some Facts Concerning Medical Education, Elicited by the Ap-
plication of the Law Governing Practice in Pennsylvania. Dr.
Henry Beates, Jr.

Laboratory Technique. M. J. Rosenau.

Presence of Tetanus in Commercial Gelatin. Jno. F. Anderson.

The Pollution of Streams with Special Reference to the Mononga-
hela River. C. B. Wood, M. D.

Fourteenth Annual Report State Board of Health of Ohio, 1899.
C. O. Probst, M. D.

Sixth Annual Report Board of Health of the Province of Quebec,
1899-1900. E. P. Lachapelle.

Twelfth Annual Report Board of Health City of Johnstown, 1901.
F. H. Singer.

Seventeenth Annual Report Board of Health of the City of
Altoona, 1901. S. B. Trees.

Annual Report of the Board of Health of the City of Williamsport,
1901. C. W. Youngman.

Report of Board of Health of the City of Reading, 1901. James
Ha

na State Board of Health, 1900-1901. Ed-

Pennsylvania Report of the Department of Agriculture, 1901. Leonard Pearson, M. D.

Sewage Pollution in the Metropolitan Area near New York City, Its Effect on the Inland Water Sources. M. O. Leighton.

Report of Progress of Stream Measurements for 1901. F. H. Newell.

Water Supply and Irrigation Papers of the U. S. Geological Survey. F. H. Newell.

Proceedings of the Nineteenth Annual Convention National Confectioner's Association of the U. S., at Saratoga, 1902. F. D. Seward.

Twenty-eighth Annual Report of the Association of Directors of the Poor and Charities of Pennsylvania, 1902. W. P. Hunker.

Report of the Ohio State Board of Health, 1901. C. O. Probst, M. D.

Infectiveness of Milk of Cows which have reached to the Tuberculos Test. J. Mohler.

Fifty-ninth Annual Report of the New York Association for Improving the Condition of the Poor.

Pennsylvania Report of the Board of Public Charities and Committee on Lunacy, 1901. Cadwallader Biddle.

U. S. Public and Marine Hospital Service, Plague Conference held in Washington, D. C., January 19, 1903. Walter Wyman.

Report of the Bureau of Animal Industry, 1901. D. E. Salmon.

State Board of Health of New Hampshire, Report, 1901-02. I. A. Watson.

Eighth Annual Report of the Board of Health of Province, Quebec, 1901-02. E. Pelletier.

Proceedings of the Seventeenth Annual Meeting of the Conference of State and Provincial Boards of Health of North America at New Haven, October 28 and 29, 1902.

Report of the President of the Board of Health of the Territory of Hawaii for the Eighteen Months, ending December 31, 1902. S. B. Doyle.

Treasury, Weekly Public Health Reports, 1902. Walter Wyman.

Experiments in Disinfection with Formaldehyde Gas. S. H. Gilliland, M. D.

Congress of American Physicians and Surgeons translated by Max J. Stern, M. D.

Boletin Extraordinario Consejo Superior de Salubrida. L. Pearson.

The Journal of Comparative Medicine and Veterinary Archives. L. Pearson.

"The Trio" Therapy, Pharmacy, Biology. F. Stearns Co.

Meniere's Disease with Report of a Case. Dr. Daland.

Aneurysm of the Heart with Thrombosis of the left Coronary Artery. Dr. Daland.

Case of Bubonic Plague with Exhibition of the Bacillus. Dr. Daland.

Observations upon Leprosy Occurring in Japan, Iceland and Norway. Dr. Daland.



APPENDIX O.

SIXTEENTH ANNUAL REPORT

OF THE

STATE PHARMACEUTICAL EXAMINING BOARD

OF

PENNSYLVANIA,

FOR THE YEAR ENDING APRIL 30, 1904.

LETTER OF TRANSMITTAL.

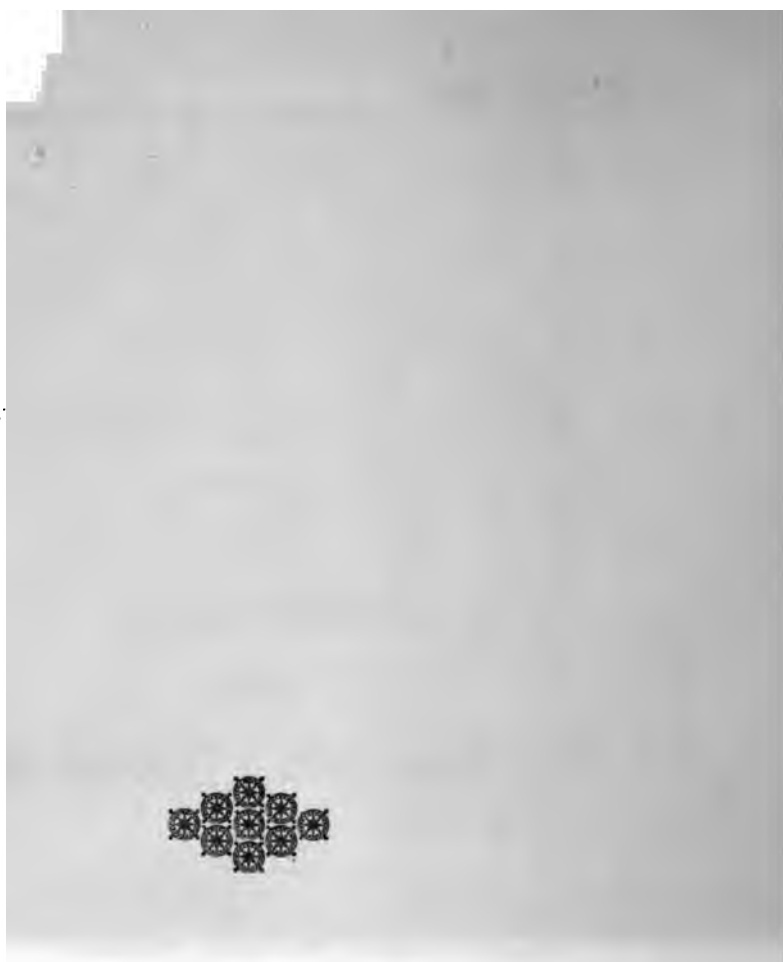
Harrisburg, Pa., June 18, 1904.

To His Excellency, Samuel W. Pennypacker, Governor:

Sir: In compliance with the provisions of section 4 of the "Act to regulate the practice of pharmacy and the sale of poisons, and to prevent the adulteration in drugs and medicinal preparations in the State of Pennsylvania," approved May 24, 1887, I have the honor to transmit the Sixteenth Annual Report of the Board for the year ending April 30, 1904.

Very respectfully yours,
CHAS. T. GEORGE,
Secretary.





REPORT.

Report of the Treasurer of the State Pharmaceutical Examining Board.

Receipts, 1903.

July 21. Williamsport,	\$444 00
Aug. 3. C. T. George,	500 00
Aug. 4. Minnich,	100 00
Aug. 3. H. C. Porter,	213 52
Oct. 13. C. T. George,	171 00
Oct. 17. Philadelphia and Pittsburg,	1,086 00
Oct. 31. C. T. George,	296 00
Dec. 30. C. T. George,	300 00

1904.

Jan. 14. C. T. George,	200 00
Jan. 16. Philadelphia,	1,077 00
Feb. 1. C. T. George,	384 72
Mar. 15. W. T. & Co.,	2 63
Mar. 16. C. T. George,	600 00
Mar. 24. C. T. George,	600 00
Apr. 6. C. T. George,	600 00
	<hr/> \$6,574 87

Expenditures, 1903.

Warrant 480—Dentzer,	\$108 14
Warrant 457—Minnich,	209 25
Warrant 1—Emanuel,	126 95
Warrant 2—Davis,	134 50
Warrant 3—Houck,	464 66
Warrant 4—Ferridy,	20 70
Warrant 5—McFetridge,	10 75
Warrant 6—C. T. George,	296 00
Warrant 7—Examiner,	71 00

Warrant	8—Cliffe,	76 60
Warrant	9—Emanuel,	205 20
Warrant	10—Houck,	781 00
Warrant	11—Cliffe,	110 50
Warrant	12—Davis,	274 65
Warrant	13—Kurzenknabe,	53 00
Warrant	14—C. T. George,	384 72
Warrant	15—Heston,	2 10
Warrant	16—McFetridge,	8 25
Warrant	17—Howe Co.,	2 50
Warrant	18—Wirz,	18 00
Warrant	19—Troemner,	100 00
Warrant	20—Cook,	34 93
Warrant	21—Cliffe,	41 99
Warrant	22—W. T. & Co.,	62 74
		<hr/> \$3,598 23

REPORT.

The first quarterly meeting of the board for the examination of applicants for registration, was held at Pittsburg and Harrisburg, April 18, 1903.

One hundred and seventy-five applicants appeared and were examined at Pittsburg, and one hundred and eighty-six at Harrisburg, making a total of 361 at both places.

Of this number 64 passed a successful examination as Registered Pharmacists, and 100 as Registered Qualified Assistant Pharmacists. The second quarterly meeting of the board was held at Williamsport, July 21, 1903.

At this meeting 145 persons appeared for examination, 89 for Registered Pharmacists' certificates and 56 for Registered Qualified Assistant Pharmacists' certificates, of this number 23 succeeded in passing a successful examination as Registered Pharmacists and 37 as Registered Qualified Assistant Pharmacists.

The third quarterly meetings of the board were held in Philadelphia and Pittsburg, October 17, 1903.

At these meetings 349 persons appeared for examination, 215 for Registered Pharmacists' certificates, and 134 for Registered Qualified Assistant Pharmacists' certificates, of this number 43 of the first named and 61 of the last named succeeded in passing a successful examination.

The fourth quarterly examination was held in Philadelphia January 16, 1904.

At this meeting of the board 352 persons presented themselves for examination, 214 for Registered Pharmacists' certificates and 138 for Registered Qualified Assistant Pharmacists' certificates. Of this number 236 succeeded in passing a successful examination as Registered Pharmacists and 88 as Registered Qualified Assistant Pharmacists.

The total number of applicants examined during the year was 1,207 being 131 less than last year.

Total number of Registered Pharmacists' certificates granted 271, 87 less than last year, total number of Qualified Assistant certificates granted 286—71 less than last year, the total number of certificates granted was 557 out of 1,207 applicants.

It gives me pleasure to report that applicants are making better preparation for these examinations than formerly, by securing for themselves the benefit of a college education and training, as an illustration: At the April examination of this year 368 applicants were examined by the board, of this number 83 were graduates of one of the Pharmaceutical Colleges of the State, and 164 had received instruction for one or two terms in the same colleges, making a total of 247 having college experience and 121 having no college instruction.

The 247 college applicants received 60 Registered Pharmacists certificates and 30 Qualified Assistant's certificates, whilst the 121 having no college instruction receive 16 Registered Pharmacists certificates and 6 Qualified Assistant's certificates. Beginning with the January examination of this year, the board has added to the usual written examination and the recognition of numbered specimens of drugs and pharmaceuticals, a practical laboratory examination, this examination was made possible for large classes through the generosity and courtesy of the Philadelphia and Pittsburg Colleges of Pharmacy granting the board the use of their laboratory and other rooms or departments of their college building for examination purposes, for smaller classes the board has secured the use of the laboratories of the High schools of Harrisburg and Williamsport.

These practical examinations have added greatly to the interest and effectiveness of the examination by the board, and have apparently won the approval of the profession throughout the State. In reference to violations of the pharmacy laws, many complaints have reached the board during the past year, all of these complaints numbering about 200, were investigated by the board, fully one-third proved to be unjustifiable complaints, the rest were carefully inspected, in many of the cases where violations of the law did exist, the demands of the board were speedily complied with, Mr. Emanuel

had prepared indictments against three Qualified Assistants who were managing their stores contrary to law, these were however withdrawn upon the sale of the stores in question.

In one case a drug store was owned by two persons, one a Registered Pharmacist, and the other by an engineer, the Registered Pharmacist withdrew from the partnership and the other continued to manage the store contrary to law, pressure of the law closed the store, and prosecution in this case was not necessary, as the store no longer exists.

Two cases in which widows of deceased pharmacists continue to manage their stores have been investigated, but as yet have not been proceeded against.

One case in which a person tried to fraudulently secure a re-issue of another Registered Pharmacist's certificate.

One case in which Hydrstin (Eclectic Resionoid) was dispensed for Hydrstinine.

Another case in which Fusel oil was used in making Hoffmans Anodyne. Mr. Cliffe investigated a large number of cases in Philadelphia and neighboring counties, and brought suit against five persons who were conducting pharmacies without registered help, these cases are now in the hands of Allen C. Thomas, Esq., of Philadelphia. Other cases are being held under advisement for the purpose of determining the character of future action.

Very respectfully yours,

CHARLES T. GEORGE,
Secretary.

Registered Pharmacists.

A.

Adams, Harry G., 338 Carpenter St., Reading.
Althoff, Samuel Y., Hanover, York county.
Altschuller, Max, 421 S. 5th St., Philadelphia.
Antill, Geo. F., 2310 N. 5th St., Philadelphia.
Anspach, Irwin M., 2300 N. 5th St., Philadelphia.
Armstrong, J. M., Ambler, Montgomery county.

B.

Baker, Daniel, Belle Vernon, Fayette county.
Baker, Howard S., 206 N. 16th St., Philadelphia.
Baldwin, Frank M., North East, Erie county.
Ball, Wm. C., Bradford, McKean county.
Bartholomew, A. D., Lock Haven, Clinton county.
Baumgartner, Oscar, Mahanoy City, Schuylkill county.
Bear, Chas. C., Quarryville, Lancaster county.
Beilstein, Albert, Jr., 706 2d St., Allegheny.
Bell, Earl S., Aiken & Walnut, Pittsburg.
Beltz, Geo. A., Derry Station, Westmoreland county.
Bennett, John R., 673 Hazle St., Wilkes-Barre.
Bentz, Chas. S., 2567 Norris St., Philadelphia.
Berkenstock, Oscar, 1451 N. 13th St., Philadelphia.
Bergey, Boyd S., Mifflintown, Juniata county.
Binder, Furman B., 123 E. 3d St., Pottstown.
Black, John E., McKeesport, Allegheny county.
Blanc, Samuel, 5th & Lombard Sts., Philadelphia.
Bogert, C. Halsey, Lambertville, New Jersey.
Boockman, M. W., 4200 Aspen St., Philadelphia.
Bowling, Thos. L., 1952 Mascher, Philadelphia.
Bowman, Bozler C., 15th and Passyunk Ave., Philadelphia.
Boyer, David A., 2401 N. 17th, Philadelphia.
Boyer, Howard J., 9th & Vine Sts., Philadelphia.
Broude, B. C., Wilmington, Delaware.
Brown, Walter E., Shenandoah, Schuylkill county.
Burke, Miles M., 2747 N. 13th St., Philadelphia.
Burt, Norman, 3431 Howell St., Philadelphia.

C.

Cable, John A. O., 665 N. 8th St., Philadelphia.
Cadwallader, Geo. H., Milton, Northumberland county.
Cameron, J. Henry, 2649 Germantown Ave., Philadelphia.
Camp, Eugene M., 2d & Market Sts., Elizabeth.

Canter, A. R.,4500 Liberty Ave.,Pittsburg.
 Carey, G. Claude,Youngsville,Warren county.
 Carlton, Albert D.,Sharon,Mercer county.
 Case, Ray H.,Lewisburg,Union county.
 Clark, R. Hall,4777 Liberty Ave.,Pittsburg.
 Cliffe, Joshua M.,2778 Kensington Ave.,Philadelphia.
 Coleman, Wm. F.,Lawndale,Philadelphia.
 Corbyn, Thos. J.,Burlington,New Jersey.
 Craver, Luther .,708 Pine St.,Philadelphia.
 Crouse, Eugene D.,3600 N. 12 St.,Philadelphia.
 Cullen, John B.,St. Clair & Jackson,Pittsburg.
 Curry, Lawrence J.,217 S. Highland Ave.,Pittsburg.

D.

Davies, Geo. B.,Lansford,Carbon county.
 Davis, Cyrus W.,Conemaugh,Cambria county.
 Davis, Thos. C.,Coatesville,Chester county.
 Davis, Horace T.,2240 Diamond St.,Philadelphia.
 Davis, Wm. A.,526 S. 16th St.,Philadelphia.
 Daub, Chas. M.,Norristown,Montgomery county.
 Davey, Wm. F.,Elmira, N. Y.,
 Day, Wm. N.,Washington,Washington county.
 Deaves, J. Emory,4730 Liberty Ave.,Pittsburg.
 Deltz, Geo. Wash.,1400 W. Huntingdon,Philadelphia.
 Dodds, Wm. H.,30th & York Sts.,Philadelphia.
 Dodson, H. M.,Delta,York county.
 Donnelly, Wm. J.,Conshohocken,Montgomery county.
 Dougherty, John E.,331 Wharton St.,Philadelphia.
 Dougherty, Wm. R.,Wrightsville,York county.
 Downall, Joseph B.,100 Natchez St.,Pittsburg.
 Dorszewsko, S. M.,627 N. 2d St.,Philadelphia.
 Dulin, Wm.,2221 E. York,Philadelphia.
 Duncan, Chester A.,Coatesville,Chester county.

E.

Eberly, John S.,5th & Market Sts.,Philadelphia.
 Eble, Francis A.,638 N. Locust St.,Philadelphia.
 Elliott, Frank E.,Franklin,Venango county.
 Elsenhart, M. J. F.,Shamokin,Northumberland county.
 Evans, Samuel M.,Pittston,Luzerne county.
 Ewing, Samuel R.,Wilmington,Delaware.

F.

Fermander, Manuel,1500 Ritner,Philadelphia.
 Finger, Philip C.,3001 Diamond,Philadelphia.
 Fiscus, Chas. E.,706 Oakwood St.,Pittsburg.
 Fitzgerald, P. T.,Sisterville, W. Va.,
 Fox, Joseph P.,7248 Woodland Ave.,Philadelphia.
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 Spaeth, Louis A.,Strasburg,Lancaster county.
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 Sphar, Robert A.,Monessen,Westmoreland county.
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APPENDIX P.

Meteorological Observations

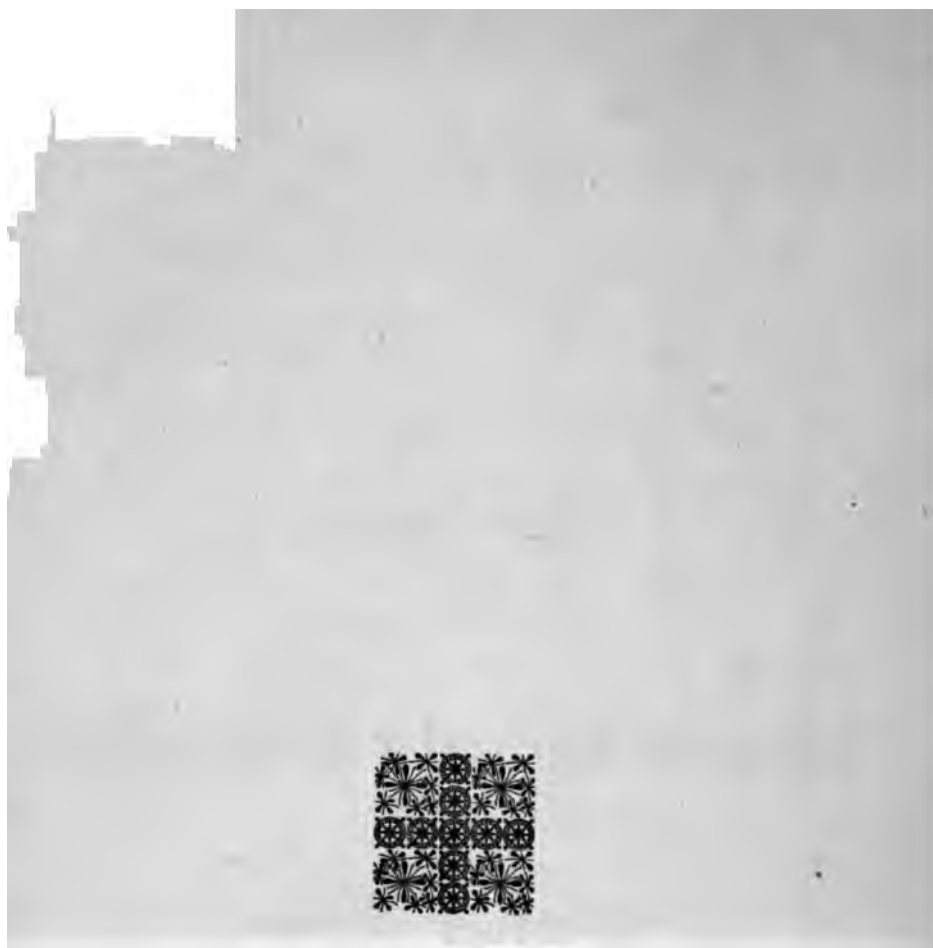
OF THE

Weather Bureau,

BY

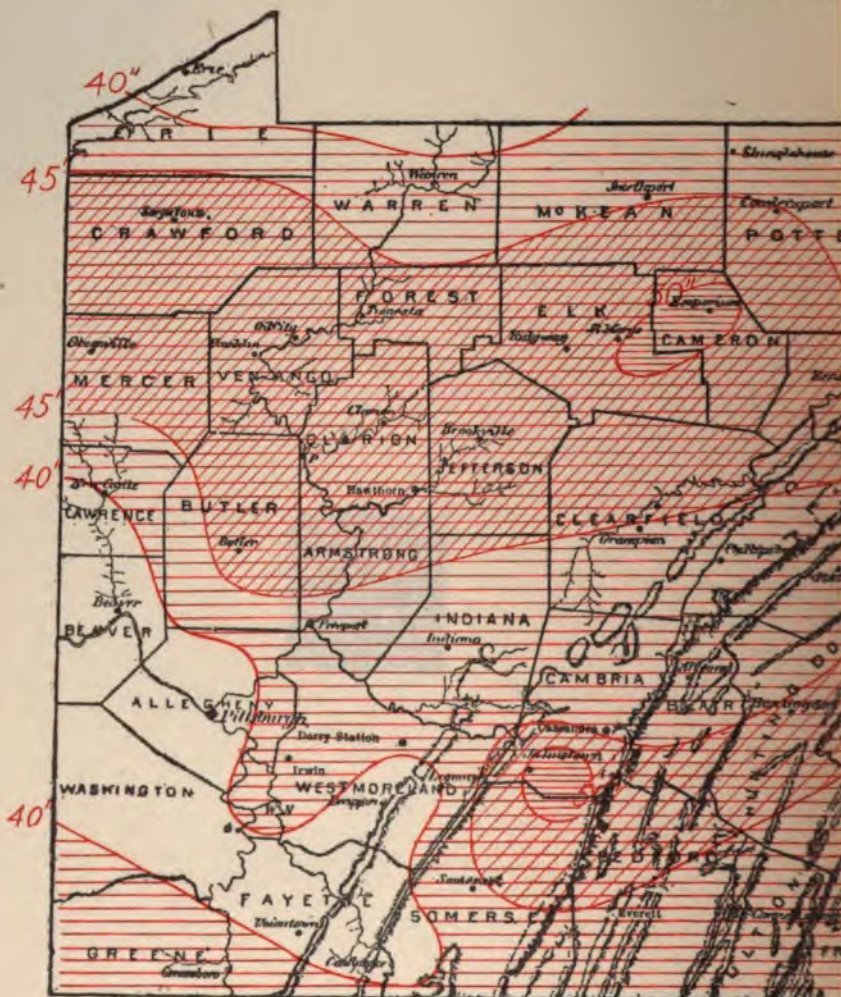
T. F. TOWNSEND,

SECTION DIRECTOR, PHILADELPHIA, PA.

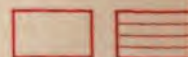




TOTAL PR

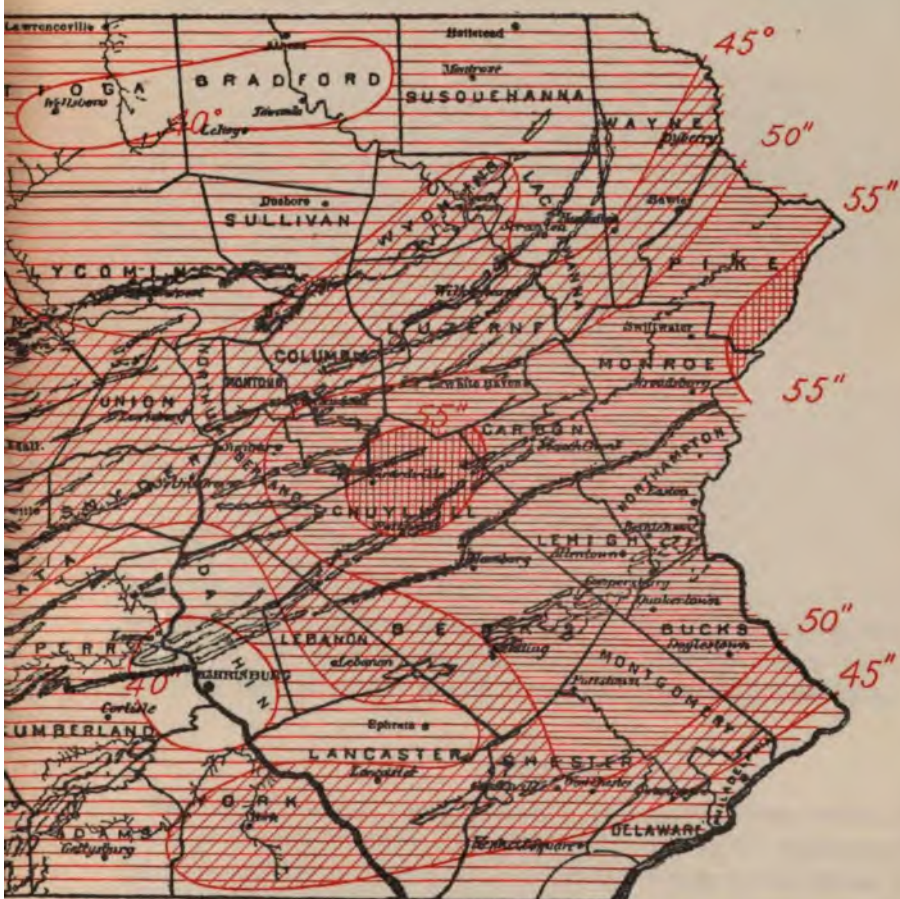


SCALE



Under 40 40 to 45

TATION, 1903.



DES—Inches.



40 50 to 55 Over 55

REVIEW OF WEATHER FOR THE SEASON OF 1903.

January.

The mean temperature for the month, 26.9 degrees, was about one-half degree below the normal, 1.3 degree higher than that for January, 1902, and no protracted warm or cold spells occurred. The average precipitation, 3.31 inches, was slightly above the normal, about an inch greater than that for the same period last year, and the heaviest for any January since 1898. Floating ice impeded navigation on the Delaware river on the 13th and 19th.

February.

The mean temperature was 30.5 degrees, or 2.8 degrees above the normal, 6.6 degrees higher than during the same period last year, the highest for any February since 1897, and the month was characterized by decided warm and cold spells. Unusually low temperatures prevailed from the 17th to the 21st, inclusive, and the last decade was productive of warm spring-like weather. The average precipitation, 4.99 inches, was about 1.25 inches in excess of the normal, 0.50 of an inch greater than for the corresponding period in 1902, and the greatest amount for any February since 1896. The heaviest rainfall of the winter occurred on the 27th and 28th.

March.

This month was a record breaker, as regards temperature, in all parts of the State. The mean, 46.4 degrees, was 5.1 degrees greater than during the same period last year, 10.4 degrees in excess of the normal, and the highest for any corresponding month in the history of the service (16 years). The average precipitation, 4.52 inches, was about three-fourths of an inch in excess of the normal, and well distributed.

April.

The mean temperature for the month was about 1 degree in excess of the normal and about 1 degree higher than during the corresponding period last year. The average precipitation was about 1 degree above the normal and was exceptionally well distributed. The entire amount fell during the first

May.

The mean temperature for the month was 2.3 degrees in excess of the normal, 2.0 degrees higher than the corresponding period in 1902, and the highest for any May since 1896. The average precipitation was only 37 per cent. of the normal and the least for any similar period in the history of this service (16 years).

June.

The mean temperature, 63.5 degrees, was 5.1 degrees below the normal and 1.3 degrees lower than the previous record (1897). Light frosts occurred in the more elevated districts on the 3d, 13th, 14th, 16th, 18th and 22d, and snow flurries in Cambria county on the 14th. The average precipitation, 6.53 inches, was 2.72 inches in excess of the normal, and about three-fourths of an inch greater than the previous highest total for any June.

July.

The mean temperature for the month, 71.2 degrees, was 0.9 degrees below the normal, and the lowest for any July since 1895. The average precipitation, 5.36 inches, was about three-fourths of an inch in excess of the normal, and fairly well distributed.

August.

The mean temperature for the month, 67.2 degrees, was 2.9 degrees below the normal, 0.6 degrees lower than for the same period in 1902, and the coldest for any corresponding month in the history of the service (16 years). The average precipitation, 5.29 inches, was 1.50 inches in excess of the normal, double the amount that fell during the corresponding period in 1902, and rather unevenly distributed.

September.

The mean temperature, 63.2 degrees, was practically normal, and 0.5 degrees higher than for the same period in 1902. The average precipitation, 2.09 inches, was only about 60 per cent. of the normal, only 40 per cent. of the amount which fell during the corresponding month last year, and unevenly distributed.

October.

The mean temperature, 53.4 degrees, was 2.2 degrees above the normal and 0.3 degrees higher than during the same period in 1902. The average precipitation, 4.64 inches, was exactly the same as during the corresponding period in last year, and 1.24 inches in excess of the normal.

November.

The mean temperature, 36.9 degrees, was 3.3 degrees, below the normal, 10.4 degrees less than during the corresponding period in 1902, and the lowest for any November in the history of the service (17 years). The average precipitation, 2.18 inches, was 1.37 inches less than normal and, with the exception of 1902, the least during any November since 1894.

December.

The mean temperature, 25.4 degrees, averaged 5.5 degrees below the normal, and was the lowest for any December in the history of the service (17 years). The average precipitation, 2.66 inches, was about six-tenths of an inch below the normal.

Climatological Data for the Year 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature (Degrees Fahrenheit).			
				Annual mean.	Highest.	Date.	Lowest.
Alapco,	Greene,	1,185	3	51.0	95	Aug. 25	9
Altoona,	Blair,	1,181	10	48.9	93	July 10,	9
Athens,	Bradford,	705	6	47.3	93	Aug. 25,	13
Belleville,	Center,	825	3	51.1	93	July 3,	13
Butler,	Butler,	1,008	4	49.2	91	July 9,	9
California,	Washington,	779	3	52.5	99	Aug. 25,	5
Cassandra,	Cambria,	2,100	10	46.8	89	May 18,	8
Center Hall,	Center,	1,373	6	49.0	92	July 4,	8
Conesville,	Chester,	1,309	10	52.4	97	July 9,	7
Coudersport,	Potter,	1,061	.....	.....	97	July 11,	.....
Derry Station,	Westmoreland,	1,322	7	50.8	93	Sept. 12,	6
Dushore,	Sullivan,	1,539	30	50.7	94	July 10,	13
Easton,	Northampton,	1,622	16	47.8	91	July 10,	10
Elkport,	Lebanon,	1,384	4	51.3	95	July 10,	5
Elkton,	Lancaster,	1,400	31	48.5	88	July 1,	4
Erle,	Erle,	1,000	6	49.1	92	July 10,	6
Everett,	Bedford,	955	7	48.8	92	July 9,	10
Franklin,	Venango,	772	1	.....	94	Aug. 24,	1
Freeport,	Armstrong, .....	.....	23	.....	97	July 9,	.....
Gettysburg,	Adams,	804	.....	.....	92	July 9,	.....
Gordon,	Schuykill,	1,570	40	.....	90	July 9,	10
Grampian,	Clearfield,	559	8	48.4	94	July 9,	12
Greenville,	Mercer,	289	10	51.0	88	July 10,	7
Hamilton,	Berks,	1,309	14	51.8	90	July 8,	8
Harrisburg,	Wayne,	1,071	4	51.8	94	July 9,	1
Hartsville,	Chaplin,	1,650	16	50.2	94	July 9,	6
Huntingdon,	Huntingdon,	1,311	7	51.5	90	Aug. 24,	3
Indiana,	Indiana,	884	15	51.4	94	Aug. 24,	3
Irwine,	Westmoreland,	1,184	15	51.4	92	July 7,	3
Johnstown,	Cambria,	275	14	51.6	92	July 10,	1
Kennett Square,	Chester, .....	.....	.....	.....	.....	.....	.....

Lawrenceville,	1,000	6	46.5	95	July 9,	-17	Feb. 17,
Lebanon,	453	16	51.5	97	July 10,	-4	Feb. 18,
Le Roy,	1,400	15	48.3	89	July 9,	-12	Feb. 18,
Lewisburg,	450	29	45.9	90	July 10,	.....	Feb. 12,
Lock Haven,	560	16	50.7	96	July 9,	-5	Feb. 19,
Lycippus,	1,420	11	50.9	93	July 24,	-6	Feb. 19,
Marion,	640	.....	.....	93	Aug. 24,	.....	.....
Mauch Chunk,	450	14	50.0	95	July 9,	-13	Feb. 18,
Mifflintown,	455	.....	.....	95	July 9,	.....	.....
Milford,	573	1	47.8	95	July 9,	-12	Feb. 18,
New Germantown,	117	.....	.....	94	Aug. 26,	.....	.....
Philadelphia,	130	33	54.2	96	July 10,	3	Feb. 19,
Philadelphia,	842	33	53.9	97	July 10,	4	Feb. 19,
Philadelphia,	1,662	2	44.1	94	Aug. 26,	-3	Feb. 19,
Pittsburg,	536	20	51.3	87	July 9,	-12	Feb. 20,
Pocono Lake,	280	26	52.0	95	July 9,	-5	Feb. 20,
Quakertown,	672	7	.....	95	July 8,	-3	Feb. 20,
Reading,	1,116	12	47.2	93	July 9,	-1	Feb. 18,
Renovo,	1,740	6	46.6	92	July 9,	-16	Feb. 18,
Saegertown,	835	4	48.3	89	June 4,	-3	Feb. 19,
St. Mary's,	465	15	51.0	92	July 8,	-7	Feb. 19,
Scranton,	1,500	32	.....	90	July 10,	-10	Feb. 19,
Sellinsgrove,	2,520	33	47.4	89	Aug. 24,	-12	Feb. 19,
Smethport,	630	12	.....	93	July 10,	-1	Feb. 18,
Somersett,	690	14	48.3	91	July 10,	-7	Feb. 19,
South Bethlehem,	1,331	16	48.2	89	July 3,	-6	Feb. 19,
South Easton,	1,125	13	.....	90	July 9,	-5	Feb. 20,
State College,	754	9	47.5	90	July 9,	-17	Feb. 18,
State College,	999	16	52.8	95	Aug. 23,	-3	Dec. 28,
Stow,	1,327	7	47.3	91	July 9,	-12	Feb. 19,
Towanda,	1,377	25	47.9	93	July 9,	-5	Feb. 18,
Uniontown,	455	49	52.7	94	July 10,	-2	Feb. 19,
Warren,	575	19	49.0	95	July 10,	-2	Feb. 19,
Wellsboro,	606	14	50.4	92	July 10,	-3	Feb. 19,
West Chester,	385	16	53.0	95	July 3,	-2	Feb. 19,
Wilkes-Barre, .....	.....	.....	.....	.....	.....	.....	.....
Williamsport, .....	.....	.....	.....	.....	.....	.....	.....
York, .....	.....	.....	.....	.....	.....	.....	.....

All records are used in determining State (or district) means, but the mean temperatures from normal temperatures and precipitation are based on records from stations that have ten or more years of observation.
*On other dates also.

Climatological Data for the Year 1903—Continued.

Stations.	Counties.	Precipitation (Inches).						Sky.			Prevailing direction of wind.		
		Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.	Number of rainy days.	Number clear days.		Number partly cloudy days.	
Aleppo.	Greene.	3	44.22	5.99	July.	0.91	Sept.	23.7	114	166	77	122	.....
Altoona.	Blair.	16	40.97	5.08	Aug.	1.50	Dec.	.....	117	.....	.....	.....	.....
Athens.	Bradford.	6	40.07	7.21	Oct.	1.42	Dec.	39.1	131	138	125	92	SW
Bellefonte.	Center.	33	44.48	7.44	June.	1.13	May.	41.3	128	65	172	.....	.....
Butler.	Butler.	4	48.48	9.29	June.	1.28	Sept.	38.3	142	152	70	143	W
California.	Washington.	2	37.92	6.70	June.	1.43	Dec.	21.9	141	167	93	105	W
Cassandra.	Cambria.	10	42.36	5.59	June.	1.85	Sept.	69.0	122	21	189	155	NW
Center Hall.	Center.	7	49.88	6.22	Oct.	1.20	Nov.	31.5	96	.....	126	99	W
Coatesville.	Chester.	16	42.38	5.92	July.	1.63	Sept.	42.3	122	159	69	137	W
Coudersport.	Westmoreland.	7	43.38	5.92	July.	1.63	Sept.	42.3	122	159	69	137	W
Derry Station.	Sullivan.	7	41.94	5.34	June.	1.75	May.	49.2	120	143	48	174	SW
Dushore.	DuSore.	25	53.52	9.15	June.	0.77	May.	24.1	119	160	76	140	.....
Emporium.	Northampton.	10	50.17	8.42	July.	1.37	May.	55.3	129	122	131	112	W
Ephrata.	Cameron.	4	43.59	7.13	Aug.	0.97	May.	24.0	144	190	44	131	W
Erie.	Lancaster.	31	35.58	4.50	June.	1.49	Jan.	49.6	171	118	90	157	W
Everett.	Erie.	6	40.72	8.57	June.	1.15	Dec.	28.5	.....	.....	.....	.....	.....
Franklin.	Bedford.	53	42.10	6.07	Aug.	1.08	Sept.	36.9	.....	129	117	119	W
Freeport.	Venango.	20	42.10	6.07	Aug.	1.08	Sept.	36.9	.....	.....	.....	.....	.....
Gettysburg.	Armstrong.	30	42.10	6.07	Aug.	1.08	Sept.	36.9	.....	.....	.....	.....	.....
Gordon.	Adams.	32	49.96	7.32	July.	1.48	Sept.	54.3	164	167	83	109	SW
Gramplan.	Schuylkill.	13	51.73	8.42	Oct.	0.32	May.	14.0	109	.....	.....	.....	.....
Greenville.	Clearfield.	8	49.96	7.32	July.	1.48	Sept.	54.3	164	167	83	109	SW
Hamburg.	Berks.	16	35.90	5.82	Aug.	0.46	May.	32.2	122	100	119	146	NW
Hamilton.	Wayne.	16	35.90	5.82	Aug.	0.46	May.	32.2	122	100	119	146	NW
Harrisburg.	Dauphin.	4	45.50	6.43	Aug.	1.40	Dec.	30.0	116	134	109	122	W
Hawthorn.	Clarion.	16	45.50	6.43	Aug.	1.40	Dec.	30.0	116	134	109	122	W
Huntingdon.	Huntingdon.	6	45.50	6.43	Aug.	1.40	Dec.	30.0	116	134	109	122	W
Indiana.	Indiana.	7	51.52	7.69	June.	1.83	Sept.	45.3	171	80	154	131	SW
Irwine.	Westmoreland.	7	51.52	7.69	June.	1.83	Sept.	45.3	171	80	154	131	SW
Johnstown.	Cambria.	19	51.52	7.69	June.	1.83	Sept.	45.3	171	80	154	131	SW
Jennett Square.	Chester.	14	51.52	7.69	June.	1.83	Sept.	45.3	171	80	154	131	SW

Lawrenceville,	6	45.31	8.50	June,	1.55	May,	46.5	112	129	109	127	SW
Lebanon,	20	48.55	7.28	Aug.,	0.94	May,	34.6	163	103	67	195	SW
Le Roy,	15	41.00	5.13	June,	1.57	Sept.,	39.8	133	134	155	134	W
Lewisburg,	29	47.19	8.02	June,	1.69	Nov.,	47.6	134	155	119	136	W
Lock Haven,	16	45.34	7.44	June,	1.67	Nov.,	36.3	127	110			
Lycippus,	11	37.57	5.00	July,	1.53	Sept.,	55.9	147				
Marion,												
Marion, Chunk,												
Marion,	14	54.33	7.99	June,	0.55	May,	38.2	115	153	89	124	N
Midland,												
Midland,												
Mifflin,	1	55.51	11.33	June,	0.56	May,	43.3	102	181	88	98	W
New Germantown,												
Philadelphia,	32	41.50	5.57	Aug.,	0.93	May,	16.0	123	131	95	139	NW
1529 Centennial Ave.,	13	53.78	7.22	Oct.,	1.20	Nov.,	13.8	136	139	111	115	NW
Pittsburg,	33	38.81	5.66	July,	1.04	Sept.,	22.8	140	101	136	123	NW
Pocono Lake,	2											W
Quakertown,	32	52.08	9.23	June,	0.69	May,	13.4	112	85	191	89	NW
Reading,	33	51.07	7.01	Aug.,	0.70	May,		132				
Renovo,	7											
Saegertown,	12	48.53	8.05	Aug.,	1.43	Sept.,	45.4	181	119	80	166	SW
St. Mary's,	6						56.0					
Scranton,	4	44.97	7.73	June,	0.96	May,	30.3	132	91	99	175	SW
Selinsgrove,	15	47.11	7.57	June,	1.23	May,	50.0	124	6	214	145	NW
Snethport,	12											
South Bethlehem,	16	46.20	7.25	June,	1.30	Sept.,	50.6	119	80	176	139	NW
South Easton,	15	45.53	6.74	June,	1.31	May,	38.5	108	136	110	119	NW
State College,	16	44.19	7.23	June,	1.24	May,	26.4	131	110	122	133	W
Swarthmore,	13											
Towanda,	9	38.27	5.05	June,	0.89	May,	3.77	142	123	67	170	NW
Uniontown,	16	33.66	6.03	June,	1.21	Sept.,	27.5	129	140	120	105	SW
Warren,	15	40.85	6.06	July,	1.80	Feb.,	58.5	139	71	189	105	NW
Warren,	16	39.54	5.68	Oct.,	1.10	Sept.,	42.5	117	103	123	133	N
West Chester,	44	55.21	7.75	June,	1.40	Nov.,	23.0	137	171	60	134	W
West Chester,	19	46.75	8.53	June,	1.12	May,	32.5	99	123	20	217	S
Williamsport,	14	43.64	6.08	July,	1.43	Sept.,	40.0	95	189	53	117	NW
Wilkes-Barre,	16	48.36	6.96	Aug.,	1.18	May,	38.8	108	159	124	82	W
York,												

All records are used in determining State (or district) means, but the mean temperatures from normal temperatures and precipitation are based on records from stations that have ten or more years of observation.

JANUARY, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.00 inches, is .13 below the normal. At the United States Weather Bureau stations the highest observed was 30.60 inches, at Philadelphia, on the 19th, and the lowest, 29.22 inches, at Pittsburg, on the 7th.

Temperature.

The means of the daily maximum and minimum temperatures, 34.9 degrees and 18.9 degrees, respectively, give a monthly mean of 26.9 degrees, which is 0.6 degree below the normal, and is 1.3 degrees above the corresponding month of 1902.

The average daily range was 16.0 degrees.

The highest monthly mean was 33.4 degrees, at Uniontown.

The lowest monthly mean was 21.6 degrees, at St. Marys.

The highest temperature recorded during the month was 68 degrees, on the 29th, at California.

The lowest temperature was—13 degrees, on the 20th, at Dyberry.

The greatest local monthly range was 70 degrees, at Aleppo.

The least local monthly range was 40 degrees, at Harrisburg.

The greatest daily range was 52 degrees, at Greenville.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 3.31, is slightly above the normal.

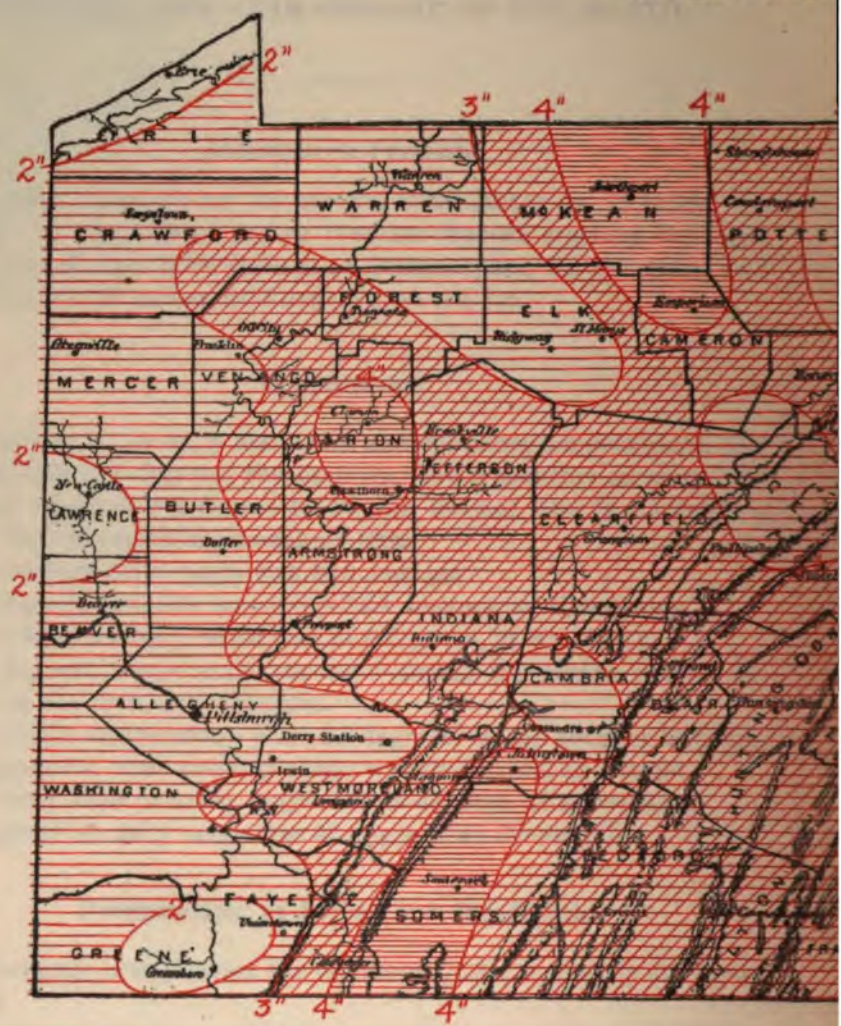
The largest totals of rainfall and melted snow were: Seisholtzville, 5.09; South Bethlehem, 5.03; West Chester, 4.91; Lebanon, 4.68; York, 4.67; Coatesville and Reading, 4.60. The least were: Erie, 1.49; Elwood Junction, 1.50; Greensboro, 1.52; Trout Run, 1.59; Uniontown, 1.68; Hamlington, 1.75.

Wind and Weather.

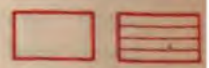
The prevailing wind was from the west.

Average number of rainy days, 11; clear, 6; partly cloudy, 8; cloudy, 17.

TOTAL PRECIPITATION



SCALE 0



Under 2 2 to 3

ON, JANUARY, 1903.



DES-Inches.



4 4 to 5 Over 5

Wilkes-Barre,	Luzerne,	575	19	28.0	+1.0	49	29	6	13	28
Williamsport,	Lycoming,	530	14	26.8	+0.2	44	*29	2	*13	29
York,	York,	385	16	30.4	+0.8	51	30	4	13	29

2 Mean of 8 a. m. + 8 p. m. + 2.
All records are used in determining State means, but State departures are determined by comparison of current data of only such stations as have normals.
*On other dates also.
A Roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

Kennett Square f.	Chester.	2.62	+0.57	1.06	5.5	9	7	11	7	W	R. A. Hunter.
Lawrenceville,	Tioga,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Lebanon,	Lebanon,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Lewistown,	Lewistown,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Lock Haven,	Lock Haven,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Lynchburg,	Lynchburg,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Mauch Chunk,	Mauch Chunk,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Milford,	Milford,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Philadelphia,	Philadelphia,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
1529 Centennial Ave.,	1529 Centennial Ave.,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Pittsburg,	Pittsburg,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Pocono Lake a.,	Pocono Lake a.,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Quakertown,	Quakertown,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Reading 2,	Reading 2,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Renovo,	Renovo,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Scranton,	Scranton,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Scranton 2,	Scranton 2,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Selinsgrove,	Selinsgrove,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Smithport,	Smithport,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Somerset,	Somerset,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
South Bethlehem,	South Bethlehem,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
South Eaton,	South Eaton,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
State College,	State College,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Center,	Center,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Towanda,	Towanda,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Uniontown,	Uniontown,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Warren,	Warren,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Wellsboro,	Wellsboro,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
West Chester,	West Chester,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Wilkes-Barre,	Wilkes-Barre,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
Williamsport,	Williamsport,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.
York,	York,	2.62	+0.57	1.06	5.5	9	7	11	7	SW	G. W. Daring, C. E.

2 Mean of 8 a. m. + 8 p. m. + 2.

All records used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

*On dates also.

A Roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

FEBRUARY, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.08 inches, is .04 below the normal. At the United States Weather Bureau stations the highest observed was 30.69 inches, at Pittsburg, on the 19th, and the lowest, 29.18 inches, at Erie, on the 4th.

Temperature.

The means of the daily maximum and minimum temperatures, 39.7 degrees and 21.3 degrees, respectively, give a monthly mean of 30.5 degrees, which is 2.8 degrees above the normal, and is 6.6 degrees above the corresponding month of 1902.

The average daily range was 18.4 degrees.

The highest monthly mean was 37.1 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 24.9 degrees, at Dyberry.

The highest temperature recorded during the month was 68 degrees, on the 2d, at California, and on the 28th, at Coatesville and Lebanon.

The lowest temperature was —17 degrees, on the 17th, at Lawrenceville, and on the 18th, at Towanda.

The greatest local monthly range was 78 degrees, at Lawrenceville.

The least local monthly range was 61 degrees, at Harrisburg, St. Marys and Wellsboro.

The greatest daily range was 50 degrees, at Lawrenceville.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 4.49, is 1.21 above the normal.

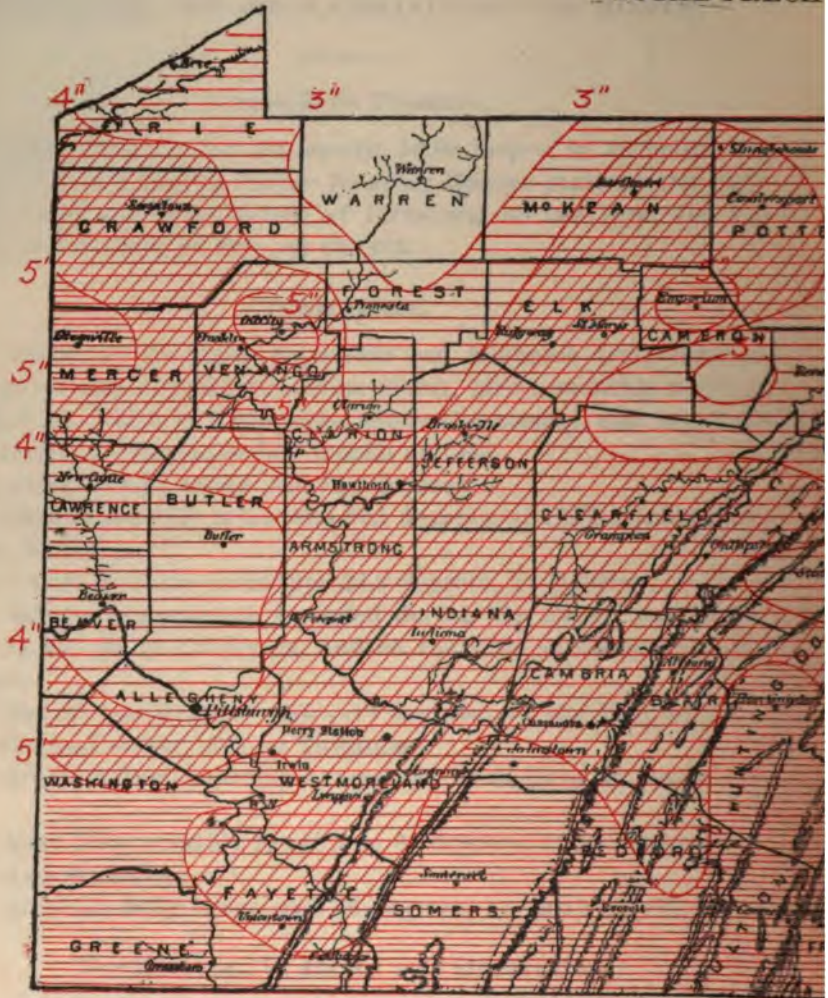
The largest totals of rainfall and melted snow were: York, 6.13; Doylestown, 6.12; Lebanon, 5.95; Mauch Chunk, 5.93; Girardville, 5.86; Johnstown, 5.80. The least were: Warren, 1.80; Lawrenceville, 2.33; Athens, 2.54; Driftwood, 2.72; Towanda, 2.73; Hamlington and Lock Haven, 2.99.

Wind and Weather.

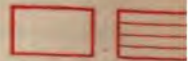
The prevailing wind was from the west.

Average number of rainy days, 10; clear, 10; partly cloudy, 7; cloudy, 11.

TOTAL PRECIP



SCALE



Under 3 3 to

N, FEBRUARY, 1903.



ES—Inches.



5 to 6 Over 6

Climatological Data for Pennsylvania, February, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.						
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.		
Aleppo.	Greene.	1,135	2	32.2	.....	62	2	-9	19	40
Altoona.	Blair.	1,181	10	30.0	+5.7	64	23	-7	19	46
Athens.	Bradford.	768	5	27.6	+4.5	58	23	-13	18	38
Belleville.	Center.	826	2	32.6	.....	58	18	-5	19	39
Butler.	Butler.	.....	2	29.6	.....	59	19	-9	19	36
California.	Washington.	770	1	34.9	.....	68	2	-6	19	39
Cassandra.	Cambria.	2,100	9	23.2	+4.0	58	23	-8	18	40
Center Hall.	Franklin.	.....	5	23.6	0	57	23	-8	19	36
Chambersburg.	Franklin.	380	16	33.5	+2.3	68	25	-7	18	39
Coatesville.	Chester.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Connersport.	Potter.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Derry Station.	Westmoreland.	1,172	6	31.6	+6.8	62	23	-6	19	38
DuShore.	Sullivan.	1,590	6	25.6	+2.8	57	23	-15	18	44
DuShore.	Wayne.	1,109	38	24.9	+2.3	55	23	-13	19	42
Easton.	Northampton.	225	23	31.3	.....	58	19	-2	20	37
Emporium.	Cameron.	1,050	16	32.3	+5.5	65	23	-9	19	42
Exeter.	Lebanon.	1,000	30	27.8	+0.3	61	23	-4	18	33
Exerott d.	Bedford.	1,090	5	29.6	+2.8	57	4	-10	18	47
Franklin.	Venango.	1,965	29	28.8	+4.1	60	4	-10	19	41
Freeport.	Armstrong.	.....	40	27.6	+2.9	66	2	-4	19	39
Greenville.	Clearfield.	380	7	28.2	.....	61	28	-10	20	43
Hamburg.	Berks.	1,600	15	26.9	+2.0	62	23	-12	19	30
Harrisburg.	Wayne.	361	15	32.8	+0.3	59	23	-8	21	37
Hawthorn.	Dauphin.	.....	16	32.2	+2.3	62	23	-1	19	43
Huntingdon.	Huntingdon.	550	7	20.6	.....	61	28	-6	19	36
Indiana.	Indiana.	884	7	31.6	.....	61	23	-9	20	35
Irwin.	Westmoreland.	.....	16	32.4	+1.3	63	4	-3	19	42
Johnstown.	Cambria.	1,184	.....	.....	.....	.....	.....	.....	19	46

Climatological Data for Pennsylvania, February, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.
Greatest daily range.									
Kennett Square.	Chester.	275	14	34.0	+1.9	82	Feb. 22	15	Feb. 17
Lewincville.	Tioga.	1,006	9	26.6	-4.0	51	Feb. 17	-1	Feb. 17
Lebanon.	Lebanon.	453	16	32.4	+2.2	75	Feb. 19	-1	Feb. 19
Le Roy.	Bradford.	1,400	15	27.0	+2.2	68	Feb. 19	-1	Feb. 19
Lewisburg.	Union.	450	22	29.9	+2.9	53	Feb. 19	-1	Feb. 19
Lock Haven.	Clinton.	600	16	31.6	+2.7	53	Feb. 19	-1	Feb. 19
Lycippus.	Westmoreland.	1,420	11	31.8	+2.9	49	Feb. 19	-1	Feb. 19
Mauch Chunk.	Carbon.	560	14	28.3	+0.7	49	Feb. 19	-1	Feb. 19
Millford.	Pike.	117	22	28.6	+1.0	53	Feb. 19	-1	Feb. 19
Philadelphia.	Philadelphia.	131	12	32.3	+1.1	53	Feb. 19	-1	Feb. 19
1823 Centennial Ave.	Philadelphia.	131	12	32.3	+1.1	53	Feb. 19	-1	Feb. 19
Pittsburg.	Allegheny.	942	22	25.4	-0.9	49	Feb. 19	-1	Feb. 19
Pottsville.	Monroe.	942	22	25.4	-0.9	49	Feb. 19	-1	Feb. 19
Quakertown.	Bucks.	335	22	32.3	+1.5	53	Feb. 19	-1	Feb. 19
Reading.	Berks.	672	20	30.0	+1.5	53	Feb. 19	-1	Feb. 19
Renovo.	Clinton.	1,200	13	27.4	+1.3	53	Feb. 19	-1	Feb. 19
Saegertown.	Crawford.	1,740	5	26.6	+1.0	53	Feb. 19	-1	Feb. 19
St. Marys h.	Elk.	535	8	30.0	+1.4	53	Feb. 19	-1	Feb. 19
Scranton.	Lackawanna.	445	15	31.4	+2.4	53	Feb. 19	-1	Feb. 19
Selinsgrove.	Snyder.	1,000	14	28.5	+1.4	53	Feb. 19	-1	Feb. 19
Smethport.	McKean.	250	47	22.4	+0.4	47	Feb. 19	-1	Feb. 19
Somerset.	Somerset.	230	12	22.4	+1.5	47	Feb. 19	-1	Feb. 19
South Bethlehem.	Northampton.	400	14	22.3	+1.3	47	Feb. 19	-1	Feb. 19
South Easton.	Wyoming.	1,351	16	24.6	+1.1	47	Feb. 19	-1	Feb. 19
State College.	Center.	1,351	16	24.6	+1.1	47	Feb. 19	-1	Feb. 19
Swarthmore.	Delaware.	724	8	27.9	+1.3	47	Feb. 19	-1	Feb. 19
Towanda.	Bradford.	499	16	27.9	+1.3	47	Feb. 19	-1	Feb. 19
Uniontown.	Payette.	1,377	14	27.9	+1.3	47	Feb. 19	-1	Feb. 19
Warren.	Warren.	1,377	14	27.9	+1.3	47	Feb. 19	-1	Feb. 19

Wellsboro,	1,327	25	59.5	+4.7	56	28	-5	18	28
Wm. Chester,	455	49	24.3	-2.5	67	28	-2	19	27
Willsboro,	455	14	21.1	+1.9	63	28	-1	19	26
Williamsport,	529	14	21.1	+1.9	63	28	-1	19	26
York,	285	16	31.4	+3.7	67	28	-2	19	26

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*Other dates also.

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for instance, "n" denotes **14 days missing**.

Kennett Square,	Chester,	+5.21	+0.74	1.17	10.0	10	11	7	10	W	R. A. Hunter.
Lawrenceville,	Toga,	2.33	-0.23	0.80	17.0	12	12	3	13	W	C. P. Darling.
Lebanon,	Lebanon,	2.36	+2.66	1.58	10.0	13	13	3	14	SW	G. W. Hayes, C. E.
Lewisburg,	Bradford,	2.56	+1.45	1.70	13.5	13	13	3	14	SW	G. W. Warton.
Lock Haven,	Clinton,	2.95	-0.24	0.91	11.5	9	7	10	11	W	Prof. J. A. Robb.
Lynchburg,	Clinton,	2.95	-0.24	0.91	11.5	9	7	10	11	W	Prof. J. A. Robb.
Mauch Chunk,	Westmoreland,	4.30	+1.30	1.63	16.5	15	15	10	11	W	Murray Forbes.
Milford,	Pike,	5.93	+1.85	1.78	10.0	11	16	3	9	N	F. C. Wimermute.
Philadelphia,	Philadelphia,	4.29	+1.10	0.91	6.8	10	12	7	11	W	Mrs. Alla Dougherty.
1529 Centennial Ave.,	Philadelphia,	4.58	+0.62	0.96	7.0	10	12	5	11	NW	U. S. Weather Bureau.
Pittsburg,	Allegheny,	3.99	+1.17	0.88	7.2	10	12	6	11	NW	John Comly.
Pocono Lake,	Monroe,	3.97	+1.17	1.45	10.0	6	15	8	14	NW	U. S. Weather Bureau.
Quakertown,	Bucks,	5.08	+1.11	1.13	9.0	9	9	14	5	NW	Pocono Lake Ice Co.
Reading,	Berks,	5.59	+2.36	1.47	10	10	10	14	5	NW	J. L. Hancock.
Renovo,	Clinton,	3.89	+1.68	1.10	10.5	18	13	8	7	SW	Franklin Yager.
Scranton,	Lawford,	4.58	+0.71	1.28	5.0	18	7	4	17	SW	Fred. C. Eyster.
St. Marys h.,	Pik,	4.58	+0.71	1.28	5.0	18	7	4	17	SW	V. G. Eppertman.
Saratoga,	Lackawanna,	4.51	+1.51	1.72	12.0	11	9	7	14	SW	U. S. Weather Bureau.
Selinsgrove,	Scraper,	4.94	+2.43	1.72	12.0	11	9	7	14	SW	U. S. Weather Bureau.
Smithport,	McKen,	4.94	+2.43	1.72	12.0	11	9	7	14	SW	J. M. Boyer, C. E.
Somerset,	Somerset,	5.16	+0.92	1.23	15.2	11	3	12	13	NW	Armstrong & Brownell.
South Bethlehem,	Northampton,	5.49	+1.94	1.68	7.0	11	3	12	13	SW	W. M. Schrock.
South Eaton,	Wyoming,	4.53	+1.74	1.39	10.0	10	13	4	11	W	Prof. M. Merriman.
State College,	Center,	3.61	+0.69	0.77	6.0	9	9	9	10	NW	B. M. Hall.
Swarthmore,	Delaware,	4.57	.....	1.26	6.0	9	1	13	8	W	Prof. Wm. Frear.
Towanda,	Bradford,	2.73	+0.64	0.70	13.0	10	11	3	14	NW	Prof. S. J. Cunningham.
Uniontown,	Fayette,	4.73	+1.34	1.25	10.5	12	8	9	11	SW	Hiram E. Ball, C. E.
Warren,	Warren,	1.80	-1.14	0.40	12.4	12	2	18	8	W	Wm. Hunt.
Wellisboro,	Toga,	3.50	+0.49	1.10	15.5	9	11	5	12	SW	James K. Simpson.
West Chester,	Chester,	4.66	+0.55	0.90	10.0	12	11	5	12	W	H. D. Deming, D. S.
Willsboro,	Luzerne,	4.13	+0.64	1.12	11.0	7	8	1	13	W	J. C. Green, D. S.
Williamsport,	Lycoming,	3.24	+0.64	0.81	8.8	6	19	1	18	NW	Henry H. Gages.
York,	York,	6.13	+3.22	1.60	12.0	10	12	5	7	W	Mrs. L. H. Grenewald.

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*On other days.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 11 days missing.

MARCH, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.21 inches, is .17 above the normal. At the United States Weather Bureau stations the highest observed was 30.60 inches, at Philadelphia, on the 3d, and the lowest, 29.59 inches, at Philadelphia, on the 31st.

Temperature.

The means of the daily maximum and minimum temperatures, 56.5 degrees and 36.4 degrees, respectively, gave a monthly mean of 46.4 degrees, which is 10.4 degrees above the normal, and is 5.1 degrees above the corresponding month of 1902.

The average daily range was 20.1 degrees.

The highest monthly mean was 51.2 degrees, at Uniontown.

The lowest monthly mean was 41.2 degrees, at Dyberry.

The highest temperature recorded during the month was 83 degrees, on the 18th, at California.

The lowest temperature was 14 degrees, on the 2d, at Dyberry.

The greatest local monthly range was 62 degrees, at Saegerstown, and Somerset.

The least local monthly range was 42 degrees, at Philadelphia.

The greatest daily range was 47 degrees, at Milford.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 4.52, is 0.67 above the normal.

The largest totals of rainfall and melted snow were: Pottsville, 5.81; Clarion, 5.66; Brookville, 5.62; Pocono Lake, 5.58; Trout Run, 5.56; Parkers Landing, 5.52. The least were: Erie, 2.82; Confluence, 2.93; Lansdale, 3.08; Selinsgrove, 3.29; Lewisburg, 3.32; Dushore, 3.36.

Wind and Weather.

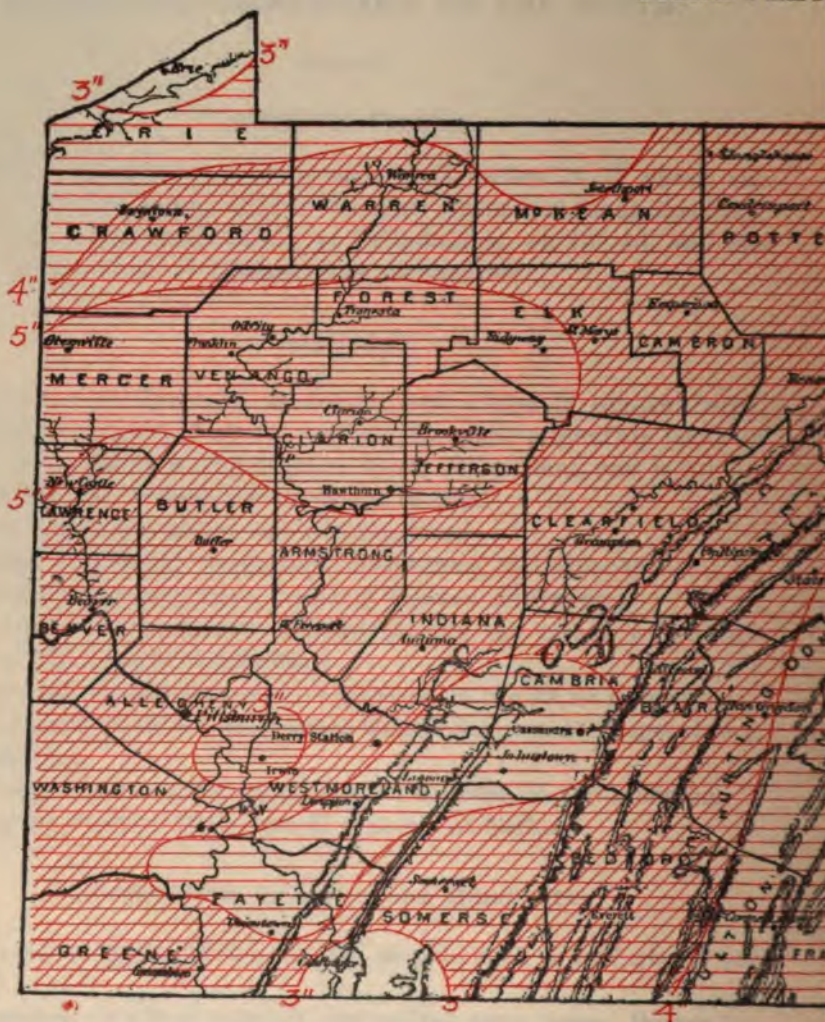
The prevailing wind was from the west.

Average number of rainy days, 11; clear, 10; partly cloudy, 14.

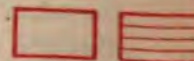
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12

TOTAL PREC



SCALE



Under 3 3 to 4

ION, MARCH, 1903.



ES—Inches.



Over 5

100

Climatological Data for Pennsylvania, March, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Date.	Lowest.	Date.	Highest.	Departure from the normal.	Mean.	Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.							
Greene,	Greene,	1,135	2	49.6	.....	78	18	21	18	21	18	78	.....	49.6	28
Blair,	Blair,	1,181	16	46.0	+6.4	77	18	20	18	20	18	77	+6.4	46.0	40
Bradford,	Bradford,	788	5	43.0	+6.9	70	19	20	19	20	19	70	+6.9	43.0	33
Centre,	Centre,	828	2	49.4	.....	80	20	22	20	22	20	80	.....	49.4	39
Butler,	Butler, .....	.....	3	46.6	.....	74	19	20	19	20	19	74	.....	46.6	36
Washington,	Washington,	770	1	50.5	.....	83	18	22	18	22	18	83	.....	50.5	39
Cambria,	Cambria,	2,100	9	44.8	+8.7	75	19	18	19	18	19	75	+8.7	44.8	40
Centre,	Centre, .....	.....	5	46.2	+9.6	74	20	21	20	21	20	74	+9.6	46.2	25
Franklin,	Franklin, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hersburg,	Hersburg,	380	16	48.4	+11.5	74	14	23	14	23	14	74	+11.5	48.4	39
Lebanon,	Lebanon, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Potter,	Potter, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Westmoreland,	Westmoreland,	1,172	6	48.8	+9.2	79	20	20	20	20	20	79	+9.2	48.8	40
Sullivan,	Sullivan,	1,590	8	41.5	+7.8	69	20	17	20	17	20	69	+7.8	41.5	40
Wayne,	Wayne,	1,380	30	45.8	+10.9	73	24	15	24	15	24	73	+10.9	45.8	41
Northampton,	Northampton,	1,380	16	45.7	+10.7	77	19	20	19	20	19	77	+10.7	45.7	32
Conestoga,	Conestoga,	1,060	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lebanon,	Lebanon, .....	.....	3	47.8	.....	70	14	23	14	23	14	70	.....	47.8	35
Erie,	Erie,	1,400	30	42.0	+9.6	77	19	18	19	18	19	77	+9.6	42.0	37
Bedford,	Bedford,	1,060	5	45.9	+5.8	73	20	23	20	23	20	73	+5.8	45.9	40
Venango,	Venango,	1,965	29	48.8	+16.8	78	19	19	19	19	19	78	+16.8	48.8	34
Armstrong,	Armstrong, .....	.....	.....	49.6	.....	79	15	21	15	21	15	79	.....	49.6	38
Clearfield,	Clearfield, .....	.....	40	45.7	+14.7	76	20	17	20	17	20	76	+14.7	45.7	33
Mercer,	Mercer, .....	.....	.....	46.0	.....	79	19	21	19	21	19	79	.....	46.0	35
Berks,	Berks,	380	7	47.2	+9.2	70	14	20	14	20	14	70	+9.2	47.2	37
Wayne,	Wayne,	1,600	15	41.8	+30.0	72	19	18	19	18	19	72	+30.0	41.8	32
Dauphin,	Dauphin,	361	15	47.4	+11.2	70	14	26	14	26	14	70	+11.2	47.4	31
Carlisle,	Carlisle, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huntingdon,	Huntingdon,	660	12	48.9	+10.8	77	18	21	18	21	18	77	+10.8	48.9	40
Indiana,	Indiana,	834	6	49.0	.....	80	19	19	19	19	19	80	.....	49.0	36
Westmoreland,	Westmoreland, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambria,	Cambria,	1,184	16	48.6	+11.4	80	19	23	19	23	19	80	+11.4	48.6	38

Climatological Data for Pennsylvania, March, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.
Kennett Square,	Chester,	275	14	47.4	+10.3	71	20	19	19
Lawrenceville,	Tioga,	1,006	5	42.8	+9.0	80	19	19	19
Lebanon,	Lebanon,	1,453	16	47.8	+10.9	70	14	22	19
Le Roy,	Bradford,	1,400	15	42.2	+10.1	73	19	19	19
Lewisburg,	Union,	1,450	22	46.2	+12.3	71	13	23	19
Lock Haven,	Clinton,	500	16	48.2	+11.7	80	20	22	19
Lycippus,	Westmoreland,	1,420	11	48.1	+8.6	79	20	21	19
Mauch Chunk,	Carbon,	1,550	14	46.2	+10.5	75	14	20	19
Millford,	Pike,	117	22	49.4	+10.3	71	14	15	19
Philadelphia,	Philadelphia,	139	13	50.3	+9.1	72	26	29	19
129 Centennial Ave.,	Philadelphia,	812	31	50.5	+11.4	75	26	29	19
Pittsburg,	Allegheny,	812	31	50.5	+11.4	75	26	29	19
Pocono Lake C.,	Monroe,	1,134	20	47.8	+12.7	77	14	21	19
Quakertown,	Berks,	290	30	48.8	+10.1	73	23	25	19
Reading,	Clinton,	673	5	46.0	+8.4	78	19	22	19
Sagestown,	Crawford,	1,200	12	44.9	+10.9	78	19	16	19
St. Marys d.,	Elk,	1,740	5	42.6	+6.8	74	19	13	19
Scranton,	Lackawanna,	805	3	45.8	.....	72	19	13	19
Selinsgrove,	Snyder,	445	15	47.6	+10.2	71	27	25	19
Smithport,	McKean,	1,500	14	43.5	+10.3	75	18	24	19
Somerset,	Somerset,	2,250	47	45.8	+10.6	80	18	18	19
South Bethlehem,	Northampton,	339	32	47.6	+9.5	72	14	26	19
South Easton,	Wyoming,	600	14	45.5	+11.4	71	19	20	19
State College,	Center,	1,191	16	44.9	+10.5	72	20	21	19
Swarthmore,	Delaware,	754	8	48.3	.....	73	20	24	19
Towanda,	Bradford,	999	16	43.9	+9.9	75	19	21	19
Uniontown,	Payette,	1,137	14	51.2	+11.8	80	20	23	19
Warren,	Warren,	1,137	14	43.7	+9.4	76	19	19	19

Wellsboro,	1,327	25	45.1	+13.9	75	19	20	2	37
West Chester,	453	49	46.6	+11.0	72	14	24	2	28
Wilkes-Barre,	515	19	45.8	+11.0	73	19	21	4	41
Williamsport,	330	14	47.8	+14.1	70	19	25	3	29
York,	385	16	48.8	+10.4	73	14	25	2	41

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*On other dates also.
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Climatological Data for Pennsylvania, March, 1903—Continued.

Stations.	Counties.	Precipitation, in inches.				Sky.			Prevailing direction of wind.	Observers.
		Total.	Departure from normal.	Greatest in 24 hours.	Total snowfall (unmelted).	Number rainy days.	Number partly cloudy days.			
							Number clear days.	Number cloudy days.		
Altoona.	Greene.	4.81	+0.18	1.48		11	11	8	E	J. S. Hinerman.
Athens.	Blair.	4.33	+1.04	1.71		11	11	11	SW	Dr. C. B. Dudley.
Belleville.	Bradford.	4.16		1.50	T.	8	10	3	SW	F. L. Estabrook.
Butler.	Center.	4.38		1.69		12	12	4	N	Fred. Kurtz.
California.	Washington.	3.98		0.75		13	14	6	N	W. L. Allen & Son.
Cassandra.	Washington.	3.47	-0.56	1.02	0.1	11	0	19	NW	W. H. W. Harmon.
Center Hall.	Cambria.	3.90	-0.42	1.17	4.0	11	16	4	NW	A. H. Boyle.
Chambersburg.	Franklin.			1.20		7	15	4	W	S. W. Smith.
Coatesville.	Chester.	3.60	-0.90	1.20		11	8	12	S	Wilson College.
Coudersport.	Water.	4.28		1.21		11	9	2	SW	W. T. Gordon.
Derry Station.	Westmoreland.	3.36	-0.57	1.13	0.5	10	14	2	W	C. H. Armstrong.
Elkton.	Sullivan.	5.11	+2.88	2.20	T.	12	13	16	SW	E. M. Whittman.
Emporium.	Washington.	4.44	+1.22	1.23		10	9	8	NW	C. E. Moynihan.
Ephtata.	Cameron.	4.84	+1.38	1.28	T.	10	12	4	W	Theodore Day.
Erle.	Lancaster.	3.87	+0.06	0.94		11	14	10	W	Prof. J. W. Moore.
Everett.	Erie.	2.82	+0.06	0.94		11	11	3	W	T. B. Lloyd.
Franklin.	Baldwin.	4.07	-0.27	1.20		14	14	6	W	W. L. Frantz.
Frederick.	Venango.					8		14	W	U. S. Weather Bureau.
Grampian.	Armstrong.	4.96	+1.92	1.22	T.	16	12	9	W	Everett Furnace Co.
Greenville.	Clearfield.	5.10	+0.89	1.40	T.	10	14	4	SW	Mrs. Anna R. Burtner.
Hamburg.	Berks.	5.34	+0.33	1.25	1.0	14	17	4	SW	R. P. Kester.
Hamilton.	Wayne.	4.54	+0.33	1.25		10	5	7	SW	Chas. H. Hummel.
Harrisburg.	Dauphin.	3.76	+0.29	1.30	0.1	13	7	6	SW	H. F. Nicholson.
Hawthorn.	Carlisle.			1.32		10	9	9	E	U. S. Weather Bureau.
Huntingdon.	Huntingdon.	4.13	+0.53	1.97		10	8	13	W	C. E. Sayres, M. D.
Indiana.	Indiana.	4.40	-0.21	1.21		11	0	20	SW	Prof. W. J. Swigart.
Irwin.	Westmoreland.	5.05	+0.97	1.33	T.	13	11	9	SW	C. R. Robertson.
Johnstown.	Cambria.	3.72	+0.30	1.03	T.	16	6	16		J. R. Gallagher.
										E. C. Lorents.

Kennett Square,	Chester,	3.89	-0.39	0.82	T.	10	13	5	13	NE	R. A. Hunter.
Lawrenceville,	Tioka,	4.67	+2.02	1.05	T.	10	12	6	13	NE	C. P. Darling.
Lebanon,	Lebanon,	4.65	+0.76	2.04	T.	12	9	10	12	E	C. W. Hayes, C. E.
Bradford,	Bradford,	4.37	+1.39	1.62	T.	15	9	5	17	SW	G. W. T. Warburton.
Union,	Union,	3.32	-0.08	1.04	.....	13	12	4	15	W	Prof. W. G. Owen.
Haven,	Clinton,	3.97	+0.46	2.07	.....	13	10	9	12	W	Prof. J. A. Robb.
Westmoreland,	Clinton,	3.42	-0.05	0.62	.....	13	10	9	12	W	Murray Forbes.
Chick,	Clinton,	4.39	+1.15	2.85	.....	13	10	9	12	W	C. V. Inermute.
Lebanon,	Clinton,	4.32	.....	2.85	T.	10	10	7	14	S	Mrs. C. V. Inermute.
Philadelphia,	Philadelphia,	4.38	+1.12	0.60	.....	10	10	7	14	SW	Mrs. A. D. Dugby.
Centennial Ave.,	Philadelphia,	4.33	+1.28	1.10	.....	12	11	7	14	SW	U. S. Weather Bureau.
burg,	Allegheny,	4.29	+1.56	1.04	.....	13	7	9	15	SW	John Comly.
no Lake c.,	Monroe,	5.58	.....	2.00	.....	7	15	1	12	SE	U. S. Weather Bureau.
ertown,	Rucks,	4.02	+0.40	1.47	.....	10	6	15	10	SW	Pocono Lake Ice Co.
ling,	Berks,	4.42	+1.00	2.13	.....	12	7	6	15	SW	J. L. Heacock.
ovo,	Clinton,	4.59	+0.48	1.85	.....	13	10	12	9	.....	Franklin Yager.
gerstown,	Crawford,	4.44	+1.67	1.00	T.	13	10	12	9	.....	Fred. C. Eyster.
Marys d.,	Elk,	.....	.....	.....	.....	13	10	12	9	.....	J. G. Apple.
Branton,	Lackawanna,	4.40	.....	2.05	.....	13	10	12	9	SW	Wm. E. Wittman.
Selmsgrove,	Snyder,	3.29	-0.51	1.33	T.	12	6	7	18	SW	U. S. Weather Bureau.
Smithport,	Rockean,	4.00	+0.35	1.15	T.	10	0	16	16	NW	J. M. Boyer, C. E.
South East,	Somerset,	4.87	+0.71	2.07	.....	10	6	6	18	NW	Armstrong & Brownell.
South East,	Wyoming,	4.67	+1.77	2.37	.....	11	8	11	12	NW	W. M. Schrock.
State College,	Center,	4.83	+1.61	2.33	.....	11	12	7	12	NW	Prof. M. Merriman.
Swarthmore,	Delaware,	4.18	+1.08	1.37	.....	13	13	4	14	W	Prof. M. Hall.
Towanda,	Bradford,	4.62	.....	1.10	.....	13	9	9	13	NW	Prof. Wm. Frear.
Uniontown,	Fayette,	3.83	+0.53	1.17	T.	15	8	5	18	NW	Prof. S. J. Cunningham.
Warren,	Warren,	3.84	+0.12	0.86	2.0	12	8	11	12	SE	Hiram E. Bull, C. E.
Wellsboro,	Tioga,	4.09	+1.46	1.50	0.3	11	4	5	22	NW	James K. Simpson.
West Chester,	Chester,	5.19	+1.58	2.25	T.	9	6	6	19	S	H. D. Deming.
Wilkes-Barre,	Luzerne,	4.09	-0.68	0.94	.....	13	8	9	14	S	J. C. Green, D. G.
Williamsport,	Lycoming,	4.33	+0.72	2.08	.....	8	8	0	23	SE	A. W. Betterly, M. D.
York,	York,	3.96	+0.71	1.58	.....	7	19	2	10	NW	Henry H. Guise.
		4.72	+1.29	2.37	T.	12	9	12	10	E	Mrs. L. H. Grenewald.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

*On other dates also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

APRIL, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 29.91 inches, is .12 below the normal. At the United States Weather Bureau stations the highest observed was 30.49 inches, at Pittsburg, on the 5th, and the lowest, 29.29 inches, at Harrisburg, on the 3d.

Temperature.

The means of the daily maximum and minimum temperatures, 60.2 degrees and 37.3 degrees, respectively, gave a monthly mean of 48.8 degrees, which is 0.9 degrees above the normal, and is 0.8 degrees above the corresponding month of 1902.

The average daily range was 22.9 degrees.

The highest monthly mean was 53.6 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 43.2 degrees, at Dushore.

The highest temperature recorded during the month was 90 degrees, on the 30th, at Philadelphia.

The lowest temperature was 12 degrees, on the 5th, at Saegertown.

The greatest local monthly range was 71 degrees, at Freeport.

The least local monthly range was 56 degrees, at Smethport.

The greatest daily range was 55 degrees, at Everett and Somerset.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 3.53, is slightly above the normal.

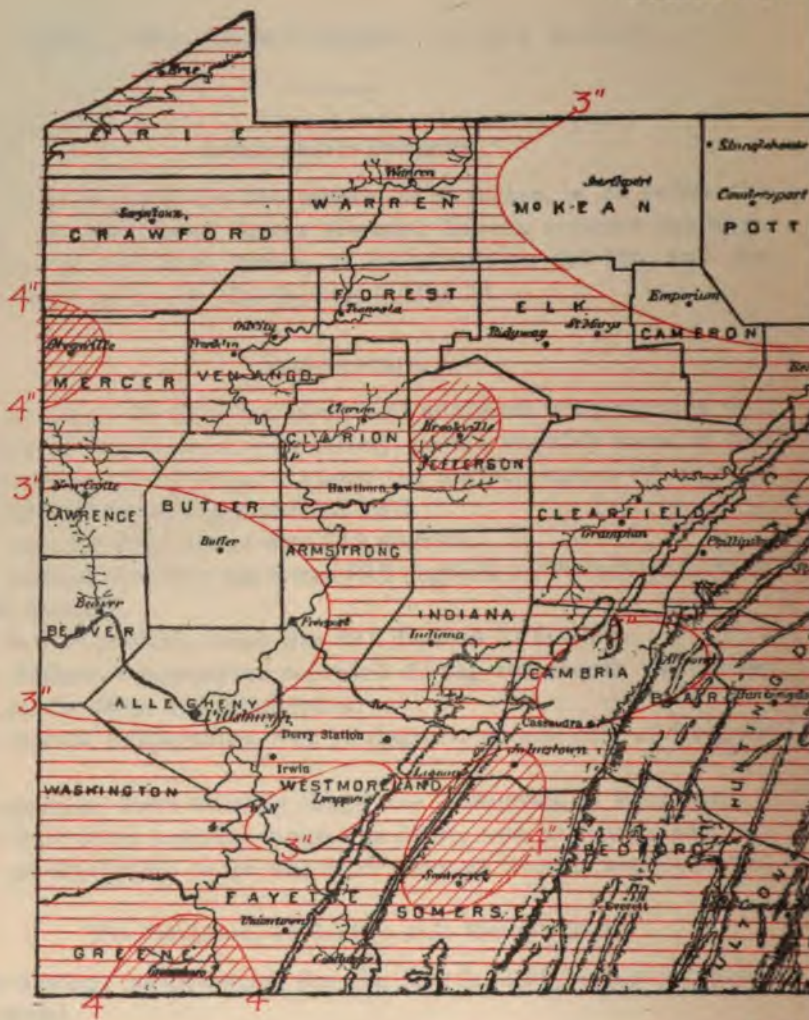
The largest totals of rainfall and melted snow were: Greensboro, 4.93; Pottsville, 4.77; Smiths Corners, 4.71; Reading, 4.62; Point Pleasant, 4.59; South Bethlehem, 4.59. The least were: Elwood Junction, 2.16; Towanda, 2.37; Lycippus, 2.43; Cassandra, 2.45; Smethport, 2.49; Beaver Dam, 2.52.

Wind and Weather.

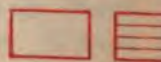
The prevailing wind was from the west.

Average number of rainy days, 10; clear, 11; partly cloudy, 7; cloudy, 12.

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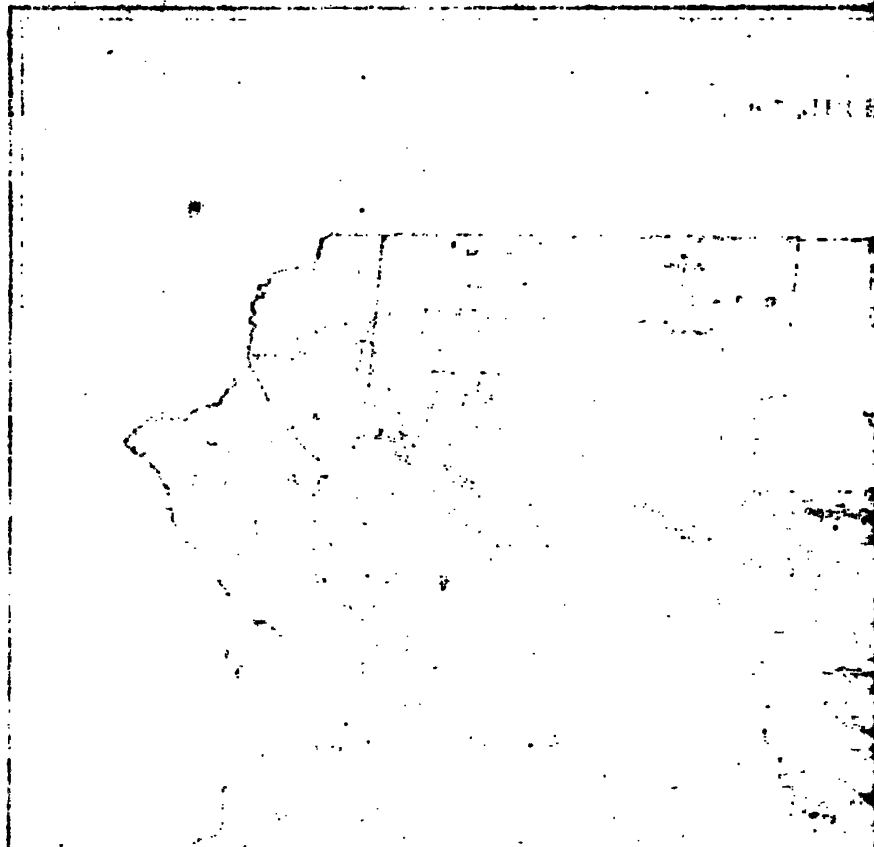


MADES—Inches.



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Climatological Data for Pennsylvania, April, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Date.	Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.		
Greene,	Greene,	1,135	16	51.0	+0.8	81	30	17	5	49
Hair,	Blair,	1,181	5	48.9		87	80	17	5	46
Bradford,	Bradford,	768	5							
Center,	Center,	826	2	50.9		87	30	22	5	49
Butler,	Butler,		3	48.0		80	*29	16	*4	39
Washington,	Washington,	770	1	52.6		84	*22	20	5	54
Cambria,	Cambria,	2,150	9	47.2	0	82	30	16	5	47
Center,	Center,		5	49.2	-0.2	83	30	19	5	46
Franklin,	Franklin,									
Greene,	Greene,	380	16	51.9	+1.6	83	30	24	5	47
Center,	Center,									
Greene,	Greene,	1,172	6	50.3		82	30	17	5	47
Westmoreland,	Westmoreland,	1,190	6	43.2	-1.2	80	*29	18	6	46
Sullivan,	Sullivan,									
Wayne,	Wayne,	1,100	28							
Northampton,	Northampton,	225	20	49.8	+0.9	84	30	25	5	42
Cameron,	Cameron,	1,630	16	47.0	-1.3	82	*29	20	5	47
Lancaster,	Lancaster,		3	50.6		86	30	23	5	38
Bedford,	Bedford,	1,400	30	45.5	+1.4	80	30	20	5	44
Erle,	Erle,	1,060	3	49.0	+1.5	87	30	19	5	55
Venango,	Venango,	955	29	47.9	+3.7	82	*29	15	5	44
Armstrong,	Armstrong,			50.4		89	30	18	5	46
Clearfield,	Clearfield,	1,570	40	45.6	+1.6	80	30	14	5	46
Merger,	Merger,			47.0		82	29	17	5	45
Warke,	Warke,	380	7	50.3	-0.2	86	30	22	7	42
Wayne,	Wayne,	1,860	15	52.9	+1.3	84	30	17	5	50
Dauphin,	Dauphin,	361	13	46.4	+1.4	83	30	15	5	47
Chapin,	Chapin,			49.4	+0.2	82	30	20	5	47
Huntingdon,	Huntingdon,	650	16	48.5		80	29	16	5	46
Indiana,	Indiana,	884	7	50.8		84	30	15	5	48
Westmoreland,	Westmoreland,		6	51.0	+1.0	87	30	19	5	44
Cambria,	Cambria,	1,184	16							

Climatological Data for Pennsylvania, April, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.
Kennett Square h.	Chester.	275	14	51.2	+2.4	86	30	29	30	37
Lawrenceville.	Tioga.	1,066	5	44.1	-1.0	86	30	29	30	54
Lebanon.	Lebanon.	453	16	51.0	+1.5	85	30	29	30	42
Bradford.	Bradford.	1,400	15	51.0	+1.5	85	30	29	30	42
Le Roy.	Le Roy.	450	22	49.8	+1.0	83	30	29	30	47
Lawisburg.	Clinton.	569	16	50.8	+1.2	83	30	29	30	46
Lock Haven.	Clinton.	569	16	50.8	+1.2	83	30	29	30	46
Lycippus.	Westmoreland.	1,430	11	50.4	0	83	30	29	30	46
Mauch Chunk.	Carbon.	550	14	50.0	+1.7	83	30	29	30	46
Pike.	Pike.	.....	.....	50.0	.....	83	30	29	30	46
Philadelph.	Philadelphia.	117	12	52.5	+1.0	87	30	29	30	44
Pittsburg.	Pittsburg.	117	12	52.5	+1.0	87	30	29	30	44
Pennal Ave.	Allegheny.	152	13	52.5	+1.0	87	30	29	30	44
Pottsville.	Pottsville.	842	33	51.6	+0.4	83	30	29	30	44
Poccono Lake h.	Monroe.	.....	.....	43.4	.....	79	30	29	30	40
Quakertown.	Bucks.	536	29	50.4	+3.2	83	30	29	30	41
Reading.	Berks.	280	30	51.2	+0.4	84	30	29	30	43
Renovo.	Renovo.	672	5	45.4	-0.4	84	30	29	30	40
Saegertown.	Crawford.	1,200	12	45.8	0	81	30	29	30	51
St. Marys.	Elk.	1,740	5	45.0	+0.6	78	30	29	30	40
Seranton.	Lackawanna.	805	2	47.6	.....	86	30	29	30	33
Snyder.	Snyder.	455	15	50.0	+0.5	87	30	29	30	45
Smethport.	McKean.	1,500	14	44.2	-0.1	87	30	29	30	45
Somers.	Somers.	2,200	47	43.4	+1.8	83	30	29	30	55
South Bethlehem.	Northampton.	339	12	51.0	-0.5	87	30	29	30	41
South Easton.	Wilmington.	669	14	49.3	+2.6	85	30	29	30	45
State College.	Center.	1,191	16	47.7	-0.1	83	30	29	30	44
Swarthmore.	Delaware.	.....	.....	51.7	.....	87	30	29	30	45
Towanda.	Bradford.	754	8	46.0	-1.4	84	30	29	30	35
Towanda.	Bradford.	979	16	53.0	+1.9	87	30	29	30	42
Uniontown.	Allegheny.	1,137	14	45.6	+1.5	83	30	29	30	31
Warren.	Warren.	.....	.....	45.6	.....	83	30	29	30	41

Wellsboro,	1,227	25	40.2	-0.2	82	20	20	5	42
West Chester,	1,227	19	51.6	+0.5	84	20	22	5	30
Willsboro,	1,227	19	51.6	+0.5	84	20	22	5	46
Williamsport,	1,227	19	49.7	+1.5	86	20	22	5	41
York,	1,227	19	51.8	+1.3	88	20	25	5	41

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 *On other dates also.
 A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

Kennett Square b.	Chester.	3.99	+0.59	1.40	T.	8	10	7	11	NW	R. A. Hunter.
Lawrenceville.	Tioga.	2.67	-0.54	1.09	.....	12	13	7	12	NW	C. W. Darling.
Lebanon.	Lebanon.	3.61	+0.22	1.37	.....	11	12	4	14	N	G. W. Hayes, C. E.
Le Roy.	Bradford.	2.51	+0.22	1.27	0.2	11	12	3	14	N	G. W. F. Wharton.
Lock Haven.	Clinton.	4.51	+0.53	1.05	.....	11	13	4	13	W	Prof. J. G. Owen.
Lycippus.	Clinton.	3.51	+0.20	1.33	.....	11	11	3	13	W	Prof. J. A. Robb.
Mauch Chunk.	Westmoreland.	2.43	-1.37	0.48	.....	11	8	8	10	W	Murray Forbes.
Millford.	Carbon.	4.40	+1.20	1.48	.....	11	12	8	10	W	F. C. Wintermute.
Philadelphia.	Pike.	3.17	.....	1.23	.....	6	15	9	6	NW	Mrs. Alla Dougherty.
1529 Centennial Ave.	Philadelphia.	3.00	-0.01	1.04	.....	9	19	7	13	N	U. S. Weather Bureau.
Pittsburg.	Philadelphia.	4.50	+1.08	1.59	.....	11	13	6	11	NE	John Comly.
Pocono Lake a.	Allegheny.	2.82	+0.02	0.83	.....	12	9	8	15	NE	U. S. Weather Bureau.
Quakertown.	Monroe.	4.57	+1.55	1.45	T.	9	13	11	6	NW	Pocono Lake Ice Co.
Reading.	Bucks.	4.62	+1.44	1.47	.....	12	14	6	10	NW	J. L. Heacock.
Renovo.	Berks.	3.05	+0.20	0.83	T.	12	14	6	10	NW	Franklin Yager.
Saegertown.	Clinton.	3.44	+0.96	1.00	T.	12	9	8	13	NW	Fred. C. Eyster.
St. Marys.	Crawford.	3.20	+1.06	1.00	.....	11	12	5	13	NW	V. G. Apple.
Selinsgrove.	East.	2.90	.....	1.00	.....	11	12	5	13	NW	Wm. E. Wittman.
Smithport.	Lyndersburg.	2.49	-1.39	0.84	.....	11	7	10	13	NE	U. S. Weather Bureau.
Snyder.	McKean.	2.49	-0.87	0.52	.....	11	8	9	13	SE	J. M. Boyer, C. E.
Somerset.	Snyder.	4.52	+0.28	0.65	0.5	11	4	13	13	NW	W. M. Schrock.
South Bethlehem.	Somerset.	4.52	+0.86	1.32	T.	11	16	6	8	SW	Prof. M. Merriman.
South Eaton.	Northampton.	3.29	+0.77	1.02	.....	12	10	7	13	NW	B. M. Hall.
State College.	Northampton.	3.81	+0.86	1.01	.....	12	10	7	13	NW	Prof. Wm. Frear.
Swarthmore.	Center.	3.71	.....	1.20	.....	9	0	23	7	NW	Prof. S. J. Cunningham.
Towanda.	Delaware.	2.87	+0.07	0.63	T.	9	14	0	16	NW	Hiram E. Bull, C. E.
Uniontown.	Bradford.	3.55	-0.13	0.80	T.	10	9	10	11	NW	Wm. Hunt.
Warren.	Fayette.	3.24	+0.27	0.71	0.7	11	8	15	7	N	James K. Simpson.
Wellsboro.	Warren.	2.76	-0.52	0.85	T.	9	9	8	13	NW	H. D. Deming, D. D. S.
West Chester.	Tioga.	4.53	+0.52	1.28	.....	8	12	3	15	NW	J. C. Green, D. D. S.
Wilkes-Barre.	Chester.	3.07	+0.61	0.81	.....	13	13	1	14	NW	A. W. Bitterly, M. D.
Williamsport.	Luzerne.	3.67	+0.91	2.11	.....	13	10	2	12	NW	Henry E. Chase.
York.	York.	3.21	+0.40	1.23	.....	9	14	7	9	E	Mrs. L. H. Grenewald.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

On other dates also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

MAY, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.13 inches, is .13 above the normal. At the United States Weather Bureau station the highest observed was 30.50 inches, at Harrisburg and Philadelphia, on the 2d, and the lowest, 29.76 inches, at Erie, on the 27th.

Temperature.

The means of the daily maximum and minimum temperatures, 75.4 degrees and 48.3 degrees, respectively, gave a monthly mean of 61.8 degrees, which is 2.3 degrees above the normal, and is 2.0 degrees above the corresponding month of 1902.

The average daily range was 27.1 degrees.

The highest monthly mean was 66.4 degrees, at Pittsburg.

The lowest monthly mean was 56.4 degrees, at Dushore.

The highest temperature recorded during the month was 94 degrees, on the 19th, at Hamburg and Mauch Chunk, and on the 17th at Lawrenceville.

The lowest temperature was 18 degrees, on the 2d, at Dushore.

The greatest local monthly range was 74 degrees, at Lawrenceville.

The least local monthly range was 46 degrees, at Uniontown.

The greatest daily range was 51 degrees, at Saegerstown.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 1.67, is 2.76 below the normal.

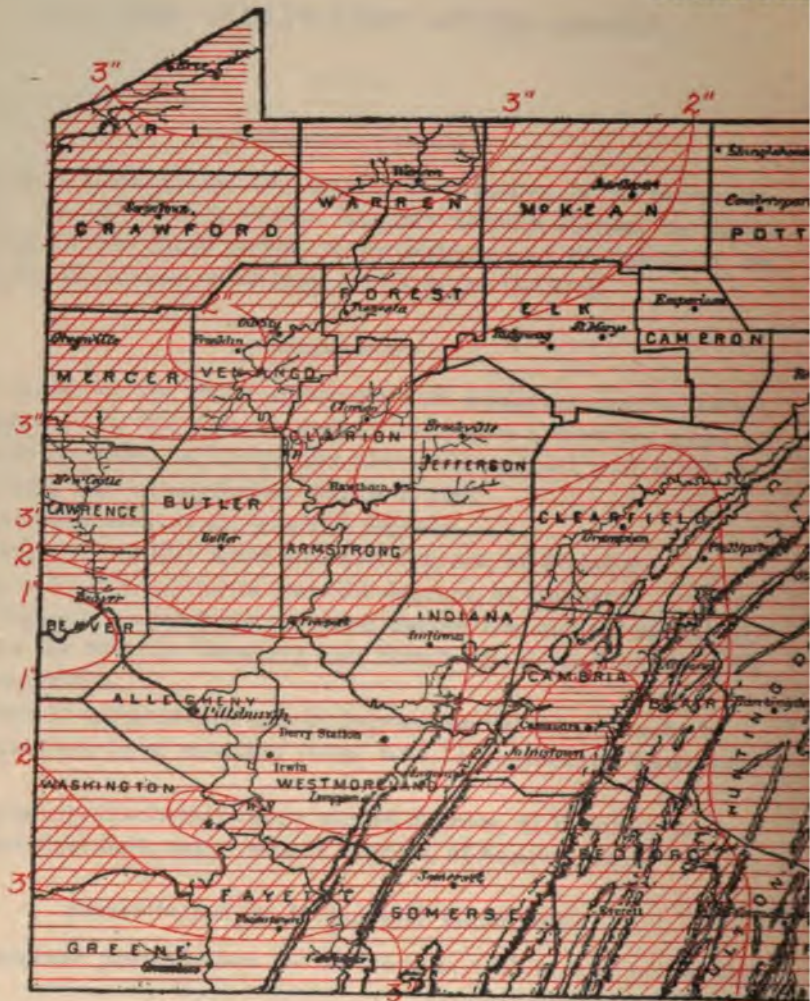
The largest totals of rainfall were: Aleppo, 4.65; Elwood Junction, 4.12; Warren, 3.68; Cassandra, 3.28; Erie, 3.20; Confluence, 3.16. The least were: Smiths Corners, 0.22; Seisholtzville, 0.22; Hamburg, 0.32; Point Pleasant, 0.34; South Bethlehem, 0.45; Pottsville and Harrisburg, 0.46.

Wind and Weather.

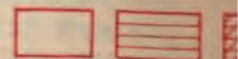
The prevailing wind was from the west.

Average number of rainy days, 7; clear, 16; partly cloudy, 9; cloudy, 6.

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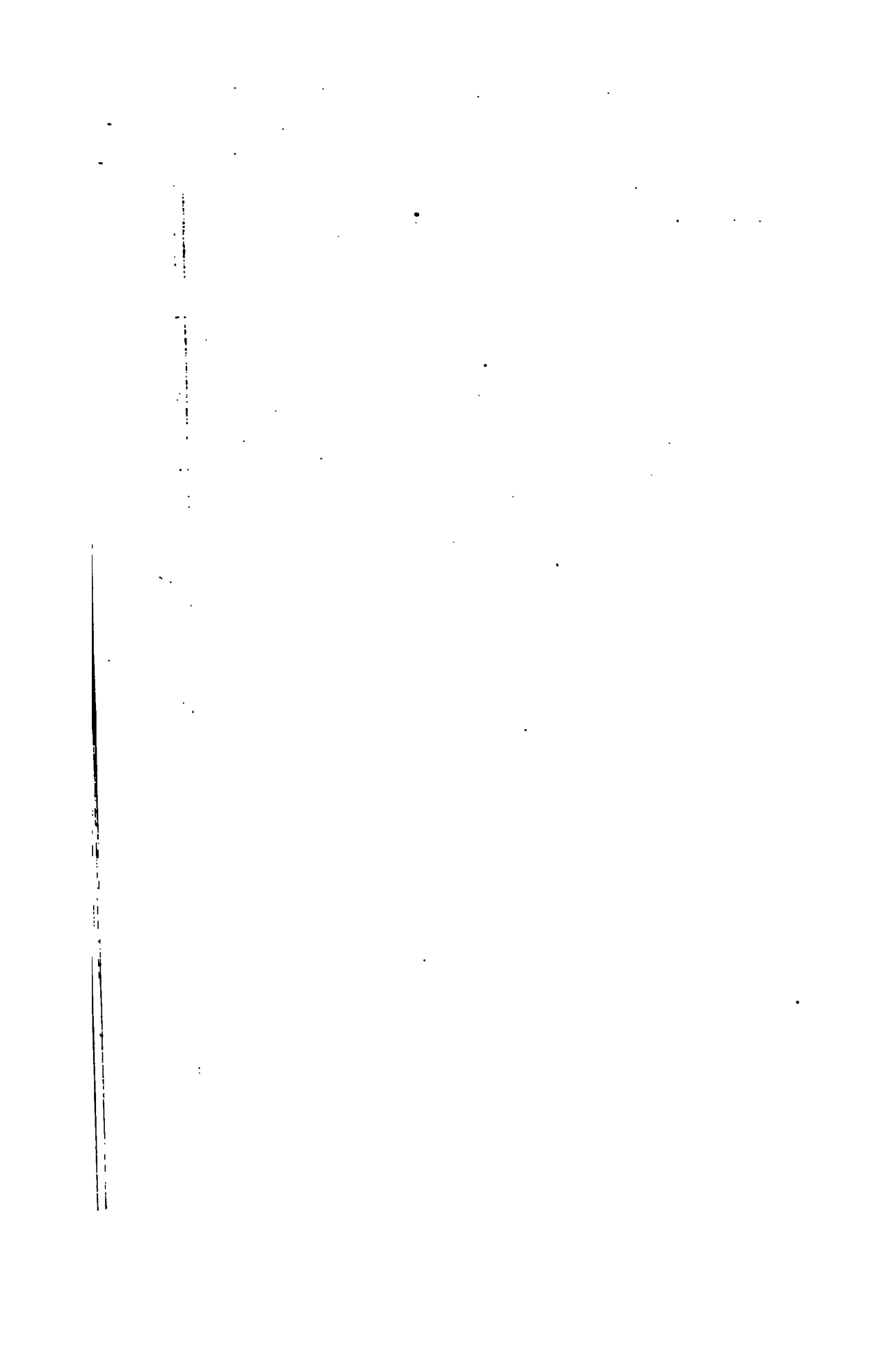
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Climatological Data for Pennsylvania, May, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	
Aleppo,	Greene,	1,135	2	64.2	.....	88	18	31	47
Altoona,	Blair,	1,181	16	60.9	+1.2	91	*18	27	45
Athens a,	Bradford,	768	2	68.4	+0.6	80	*17	31	41
Belleville,	Center,	828	2	62.6	.....	80	*18	28	41
Butler,	Butler,	1,750	1	65.1	.....	92	*18	28	40
Cambria,	Washington,	1,770	9	65.1	.....	92	*18	28	40
Cassandra,	Cambria,	2,100	5	59.6	+0.2	89	*18	28	39
Center Hall,	Center,	2,100	5	62.1	+1.2	89	*18	27	46
Chambersburg,	Franklin,	380	16	63.8	+2.9	93	*19	28	41
Coatesville,	Chester,	1,172	6	64.4	+2.4	85	*18	21	44
Coudersport,	Potter,	1,590	6	56.4	+0.5	87	*18	31	43
Derry Station,	Westmoreland,	1,109	55	62.8	+2.3	91	20	31	43
DuBois,	Wayne,	325	20	60.3	-0.5	89	18	24	40
Easton,	Northampton,	1,050	16	63.2	.....	90	*19	28	37
Emporium,	Cameron,	1,400	20	60.6	+2.9	84	*20	31	44
Ephrata,	Lancaster,	1,400	3	60.7	+0.4	87	*17	27	41
Erie,	Bedford,	1,962	29	65.2	.....	91	*18	28	46
Frederick,	Verde,	1,370	40	58.0	+0.9	86	*18	28	45
Frederick,	Armstrong,	1,370	40	61.4	.....	89	*18	28	42
Greenville,	Clearfield,	380	7	64.0	+2.1	94	19	29	39
Hamburg,	Berks,	1,600	15	58.2	+0.7	88	23	33	46
Hamilton,	Wayne,	361	15	64.4	+4.2	91	18	34	29
Harrisburg,	Dauphin,	650	16	61.5	+1.3	89	*18	25	47
Hawthorn,	Clarion,	650	7	64.2	.....	86	*19	31	46
Huntingdon,	Huntingdon,	650	7	64.2	.....	86	*19	31	46
Indiana,	Indiana,	654	16	63.6	+4.0	90	*18	28	43
Irwin,	Westmoreland,	1,184	16	63.6	+4.0	92	*18	28	43
Johnstown,	Cambria,	1,184	16	63.6	+4.0	92	*18	28	43

Climatological Data for Pennsylvania, May, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.
Academy Square,	Chester,	275	14	63.7	+2.0	90	20	32	23
Academyville,	Tioga,	1,005	15	58.2	+2.3	84	17	30	49
Adams,	Lebanon,	1,453	16	63.2	+2.0	92	16	30	49
Adamsburg,	Bradford,	1,400	15	59.2	+2.0	85	16	30	41
Adamsport,	Union,	1,460	32	61.8	+2.7	90	*18	26	43
Adamsport,	Clinton,	650	16	62.4	+2.0	91	18	30	43
Adamsport,	Westmoreland,	1,420	11	64.7	+4.2	86	*18	31	45
Adamsport,	Carbon,	550	14	63.2	+2.3	94	19	28	41
Adamsport,	Pike,	117	32	65.6	+3.6	93	18	34	45
Adamsport,	Philadelphia,	120	13	65.9	+2.8	93	20	36	29
Adamsport,	Philadelphia,	842	23	66.4	+4.2	88	*18	36	31
Adamsport,	Allegheny,	336	30	65.9	+2.6	85	*18	29	45
Adamsport,	Monroe,	336	30	65.9	+2.6	92	19	29	41
Adamsport,	Bucks,	336	30	65.9	+2.6	92	19	29	41
Adamsport,	Berks,	472	30	64.5	+3.1	92	20	29	39
Adamsport,	Clinton,	1,200	12	59	+2.0	80	18	30	11
Adamsport,	Crawford,	1,740	5	60.8	+2.6	88	13	25	32
Adamsport,	Elk,	1,805	5	60.8	+2.6	88	13	25	32
Adamsport,	Lackawanna,	455	15	63.2	+2.0	89	*18	27	35
Adamsport,	Snyder,	1,500	11	56.5	+1.0	85	17	29	48
Adamsport,	McKean,	2,250	47	60.6	+3.7	87	*17	26	37
Adamsport,	Somerset,	339	12	62.3	+0.1	91	*19	30	43
Adamsport,	Northampton,	660	14	60.0	+2.7	85	18	28	44
Adamsport,	Wyoming,	1,191	16	60.7	+1.6	88	*18	28	44
Adamsport,	Center,	754	8	59.2	+0.4	92	20	33	29
Adamsport,	Delaware,	999	16	62.9	+4.2	86	19	40	29
Adamsport,	Bradford,	1,137	14	60.1	+4.3	86	18	25	40
Adamsport,	Fayette,								
Adamsport,	Warren,								

Wellsboro,	1,727	25	57.5	+0.5	89	17	25	2	41
West Chester,	455	49	64.2	+3.9	90	20	23	2	29
Wilkes-Barre,	575	19	60.6	+0.1	90	19	28	2	38
Williamsport,	530	14	63.2	+3.2	87	19	30	2	47
York,	385	16	63.0	+1.8	92	20	31	2	37

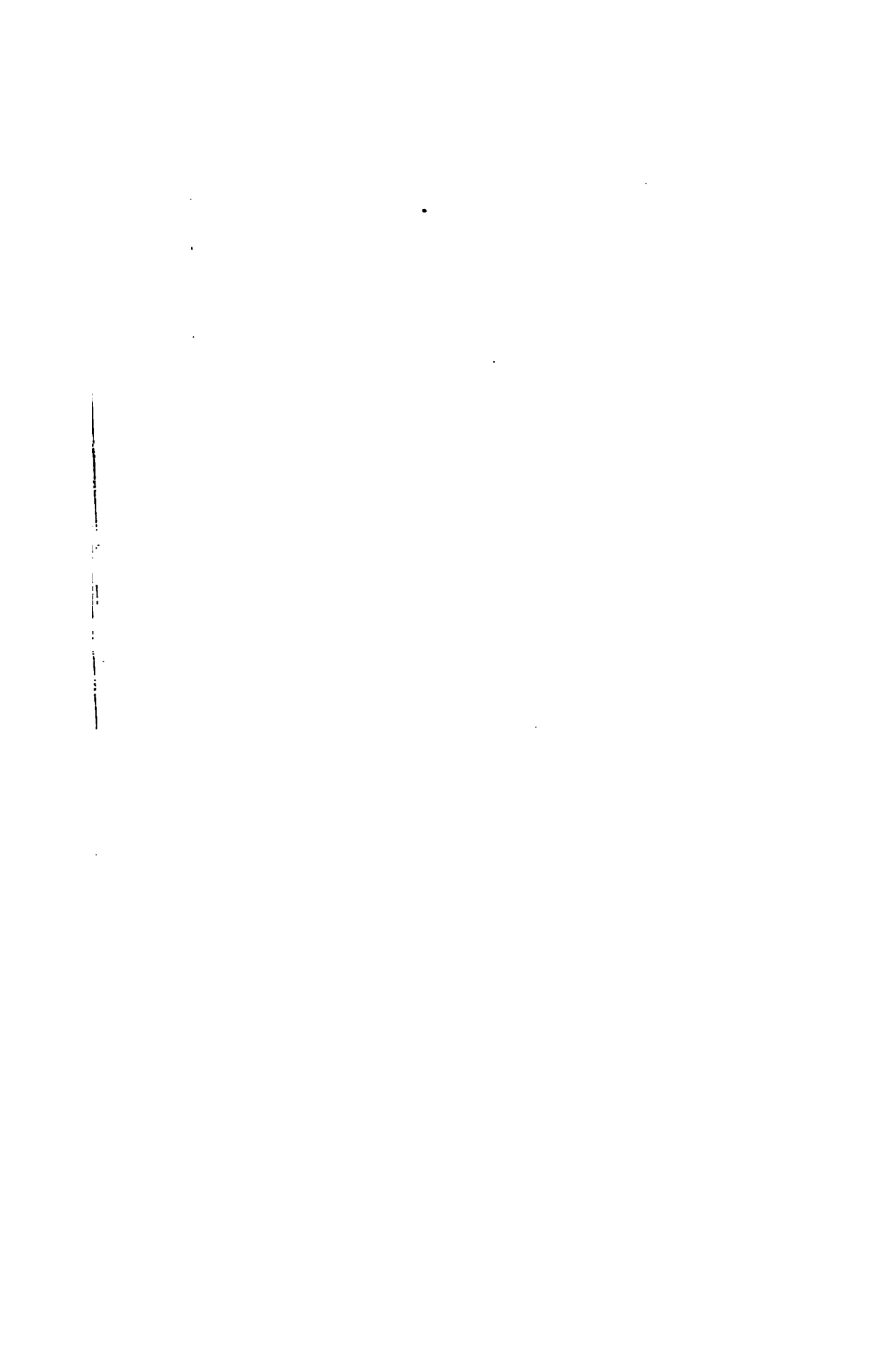
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.
 On other dates also.
 A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;
 for instance, "n" denotes 14 days missing.

1. The first part of the document is a list of names and addresses of the members of the committee.

2. The second part of the document is a list of names and addresses of the members of the committee.

Climatological Data for Pennsylvania, May, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	
Aleppo,	Greene,	1,135	2	64.2	+1.2	88	18	31	47
Altoona,	Blair,	1,181	16	60.9	+0.6	91	*18	27	45
Athens a,	Bradford,	1,768	2	58.4	+0.5	90	*17	21	51
Belleville,	Center,	826	2	62.6	.....	90	19	28	41
Butler,	Butler,	770	3	63.4	.....	89	*18	29	41
California,	Washington,	770	1	65.1	.....	92	*18	26	44
Cassandra,	Cambria,	2,100	9	59.6	+0.2	89	18	28	29
Center Hall,	Center, .....	.....	5	62.1	+1.2	89	18	27	46
Chambersburg,	Franklin,	380	16	63.6	+2.9	83	*19	28	41
Coatsville,	Chester, .....	.....	6	56.6	+0.5	85	*18	31	44
Coudersport,	Fulton,	1,172	6	56.4	+0.5	87	*18	20	48
Delaware,	Westmoreland,	1,590	25	60.3	-0.5	91	20	31	43
Delaware,	Wayne,	1,100	25	60.3	-0.5	91	20	31	43
Easton,	Northampton,	1,235	20	62.8	+2.3	89	18	24	40
Emporium,	Cameron,	1,050	16	60.3	-0.5	89	18	24	40
Ephrata,	Lancaster,	1,400	30	59.6	+2.9	90	*19	28	37
Everett a,	Erie,	1,060	5	60.5	+0.4	84	*20	32	34
Franklin,	Bedford,	1,060	5	60.5	+0.4	90	*17	27	41
Freeport,	Yenango,	955	29	61.7	.....	87	*17	23	44
Greenville,	Armstrong,	1,570	40	58.0	+0.9	91	*18	23	45
Hamburg,	Clearfield,	380	7	64.0	+2.1	86	*18	23	45
Harrisburg,	Berks,	1,900	15	63.2	+0.7	94	19	29	39
Harrisburg,	Wayne,	361	15	63.2	+0.7	88	23	32	36
Harrisburg,	Dauphin,	650	16	61.5	+1.3	88	*18	24	47
Harrisburg,	Hanover,	650	16	61.5	+1.3	88	*18	24	47
Irwin,	Indiana,	584	7	64.2	.....	90	*19	31	48
Johnstown,	Westmoreland,	1,184	16	63.6	+4.0	92	*18	28	43
Johnstown,	Cambria,	1,184	16	63.6	+4.0	92	*18	28	43



Climatological Data for Pennsylvania, May, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.						
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	
										Greatest daily range.
Kennett Square,	Chester,	275	14	62.7	+2.0	90	20	82	22	33
Lawrenceville,	Toga,	1,066	5	58.2	+1.5	94	17	58	20	49
Lebanon b,	Lebanon,	1,458	16	59.4	+3.2	92	18	59	20	41
Lebanon,	Bradford,	1,458	15	59.2	+3.0	92	19	59	22	44
Lewisburg,	Union,	1,459	16	61.8	+2.7	90	18	60	25	40
Lock Haven,	Clinton,	650	13	63.4	+2.0	91	18	60	26	42
Lycippus,	Westmoreland,	1,439	11	64.7	+2.3	86	18	61	20	43
Mauch Chunk,	Carbon,	1,550	14	62.2	+2.3	94	19	58	31	45
Mifflord,	Pike,	1,550	12	62.0	+2.0	93	18	58	34	41
Philadelphia,	Philadelphia,	317	32	65.6	+2.5	92	20	59	36	39
1529 Centennial Ave.,	Philadelphia,	129	13	65.9	+2.5	92	20	59	36	39
Pittsburg,	Allegheny,	842	23	64.4	+1.2	88	18	58	36	33
Poccono Lake b,	Monroe,	336	1	65.9	+1.2	88	18	58	36	33
Quakertown,	Bucks,	280	29	62.0	+3.6	92	19	51	29	41
Reading,	Bucks,	280	30	64.5	+3.1	92	20	59	29	39
Renovo,	Clinton,	672	3	62.0	+3.1	92	20	59	29	39
Shenandoah,	Clinton,	1,200	12	59.6	+2.8	90	18	50	20	51
St. Marys b,	Elk,	1,740	15	60.3	+3.6	84	18	42	25	51
Scranton,	Lackawanna,	805	12	60.3	+3.6	88	19	37	27	35
Sellersburg,	Snyder,	455	15	62.3	+2.0	89	18	48	28	47
Shenandoah,	McKean,	1,900	14	56.8	+1.0	85	17	50	30	43
Somersport,	Somerset,	2,250	17	60.6	+3.7	87	17	36	37	43
South Bethlehem,	Northampton,	339	12	62.3	+0.1	91	19	39	39	43
South Eaton,	Wyoming,	660	14	60.0	+2.7	86	18	33	33	44
State College,	Center,	1,191	15	60.7	+1.6	88	18	33	33	44
Swarthmore,	Delaware,	754	8	59.2	+0.4	92	20	33	33	43
Towanda,	Bradford,	999	16	65.9	+1.3	88	18	32	32	42
Uniontown,	Payette,	1,137	14	60.1	+1.3	86	19	40	34	40
Warren,	Warren,	1,137	14	60.1	+1.3	86	19	40	34	40

Well-boro,	1.27	25	57.5	+0.5	89	17	25	2	41
West Chester,	1.45	43	64.2	+3.9	90	20	33	2	29
West Chester,	575	19	60.6	+0.1	90	19	28	2	38
Wills-Barre,	530	14	63.2	+3.2	87	19	30	2	47
Williamsport,	385	16	63.0	+1.8	92	20	31	2	37
York,									

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.
 * Other stations also.
 A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record:
 for instance, "n" denotes 14 days missing.

Climatological Data for Pennsylvania, May, 1903—Continued.

Stations.	Counties.	Precipitation, in inches.				Sky.				Prevailing direction of wind.	Observers.
		Precipitation, in inches.				Sky.					
		Total.	Departure from normal.	Greatest in 24 hours.	Total snowfall (unmelted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.		
Aleppo,	Greene,	4.65	1.76	2.55	.....	6	21	3	7	NE	J. S. Hinerman.
Altoona,	Bialr,	2.63	1.54	1.13	.....	8	18	10	3	SW	Dr. C. B. Dudley.
Athens a,	Bradford,	2.09	0.71	1.13	.....	8	11	10	3	SW	F. L. Estabrook.
Bellefonte,	Center,	1.13	.....	1.25	.....	8	21	2	15	W	Fred. Kurtz.
Butler,	Washington,	2.85	.....	1.25	.....	8	21	2	8	W	W. L. Allen & Son.
California,	Butler,	1.73	.....	0.53	.....	8	29	3	2	NW	H. W. Harmon.
Cassandra,	Franklin,	3.23	1.80	T.	.....	8	16	5	8	SW	A. H. Boylston.
Center Hall,	Center,	1.10	2.46	0.30	.....	8	18	5	8	W	S. W. Smith.
Chambersburg,	Franklin,	2.13	3.53	0.77	.....	11	12	15	4	S	Wilson College.
Coatsville,	Potter,	1.06	0.40	0.40	.....	11	14	7	10	SW	W. T. Gordon.
Coudersport,	Westmoreland,	1.64	0.18	0.43	.....	7	14	6	10	SW	C. H. Armstrong.
Derry Station,	Sullivan,	1.25	0.25	0.33	.....	7	19	6	6	W	D. M. Wineman.
DuShore,	Wayne,	0.77	0.92	0.44	.....	6	16	9	6	N	C. E. Molyneux.
Easton,	Northampton,	1.87	0.64	0.44	T.	6	16	9	6	.....	Theodore Day.
Emporium,	Cameron,	1.37	1.04	0.44	.....	7	21	7	3	E	Prof. J. W. Moore.
Ephrata,	Lancaster,	0.97	0.67	0.67	.....	7	21	4	3	SE	T. B. Lloyd.
Erle,	Franklin,	2.20	0.85	2.07	.....	9	21	4	3	SE	W. L. Frantz.
Everett a,	Bedford,	2.24	0.91	0.90	.....	8	17	7	3	E	U. S. Weather Bureau.
Franklin,	Venango,	1.98	1.27	1.31	.....	6	14	16	0	SW	B. L. Steckman.
Freeport,	Armstrong,	2.22	1.76	0.73	.....	6	13	9	3	W	Venango Water Co.
Grampian,	Clearfield,	2.51	1.80	0.75	.....	6	13	9	3	W	Mrs. Anna R. Burtner.
Greenville,	Mercer,	2.09	0.25	0.75	.....	7	17	7	7	W	R. P. Kester.
Hamburg,	Berks,	0.32	0.38	0.16	.....	7	25	3	8	SE	A. M. Orr.
Hamilton,	Wayne,	1.03	3.53	0.40	.....	5	.....	.....	.....	.....	Chas. H. Hummel.
Harrisburg,	Dauphin,	0.46	2.24	0.31	.....	7	12	5	13	SW	H. F. Nicholson.
Hawthorn,	Clarion,	1.99	0.70	0.70	.....	6	27	8	10	SE	U. S. Weather Bureau.
Huntingdon,	Huntingdon,	1.76	1.01	0.61	.....	8	13	7	6	W	J. M. Yeary.
Indiana,	Westmoreland,	1.16	0.00	0.50	.....	8	13	7	11	SW	Prof. W. J. Swigart.
Irwin,	Cambria,	2.36	0.24	0.27	T.	9	17	11	3	W	C. B. Robertson.
Johnstown, .....	.....	.....	.....	.....	.....	9	13	9	8	SE	J. B. Gallagher.
.....	.....	.....	.....	.....	.....	9	13	9	8	SE	E. C. Lorenz.

Kennett Square,	3.21	-2.67	1.70	10	11	14	6	S	R. A. Hunter.
Lawrenceville,	1.65	-1.57	0.60	6	21	5	5	SE	C. F. Darling.
Lebanon,	0.84	-5.22	0.36	7	13	9	11	NE	G. W. Hayes, C. E.
Bradford,	2.00	-2.80	0.50	11	13	9	4	W	G. W. Wadburton.
Le Roy,	2.40	-2.13	0.62	10	13	9	4	W	Prof. W. G. Green.
Lewisburg,	1.09	-2.14	0.52	6	18	9	4	W	Prof. J. A. Robb.
Lock Haven,	1.56	-2.38	0.66	2	17	8	6	W	Murray Forbes.
Lycippus,	0.82	-5.45	0.25	8	21	6	4	SE	F. C. Wintermute.
Mauch Chunk,	0.93	.....	.....	11	12	9	10	NE	Mrs. Alla Doughty.
Mifflin,	0.83	-2.29	0.38	11	15	9	7	NE	U. S. Weather Bureau.
Philadelphia,	2.08	-2.58	1.15	7	21	10	8	NW	John Conly.
Pittsburg,	1.67	-1.75	0.71	7	21	10	8	NW	U. S. Weather Bureau.
Allegheny,	0.82	0.48	.....	3	3	3	5	W	Pocono Lake Ice Co.
Monroe,	0.63	-3.87	0.43	3	10	18	3	SE	J. L. Heacock.
Pocono Lake b,	0.70	-5.14	0.30	11	.....	.....	.....	.....	Franklin Yeager.
Quakertown, .....	.....	.....	.....	.....	.....	.....	.....	.....	Fred. C. Eyster.
Reading, .....	.....	.....	.....	.....	.....	.....	.....	.....	J. G. Apple.
Renovo,	2.71	-2.43	1.13	8	20	6	5	NW	Wm. E. Wittman.
Saegertown,	1.90	-1.92	0.60	6	8	20	7	NE	U. S. Weather Bureau.
St. Marys b,	0.96	.....	0.35	8	14	18	5	SE	J. M. Boyer, C. E.
Scranton,	1.28	-4.01	0.40	8	9	19	10	SE	Armstrong & Brownell.
Sellingrove,	2.70	-2.73	0.97	5	13	11	7	NW	W. M. Schrock.
Smythport,	2.12	-4.92	0.58	5	17	8	6	NW	Prof. M. Merriman.
Somerset,	1.31	3.37	0.49	5	18	9	4	NW	B. M. Hall.
South Bethlehem,	1.24	-3.37	0.36	5	12	12	7	S	Prof. Wm. Frear.
South Easton,	0.70	0.32	.....	7	0	27	4	SW	Prof. S. J. Cunningham.
State College,	0.89	-2.15	0.23	8	22	3	6	NW	Hiram E. Bull, C. E.
Swarthmore,	2.65	-2.46	1.43	6	17	9	5	SE	Wm. Hunt.
Towanda,	3.63	-1.27	1.30	7	10	21	0	.....	James K. Simpson.
Uniontown,	2.13	-3.13	1.10	6	17	11	3	.....	H. D. Deming, D. S.
Warren,	3.68	-1.27	1.10	6	17	11	3	.....	J. C. Green, D. S.
West Chester,	2.76	-2.01	0.77	13	22	4	5	SE	A. W. Beach, M. D.
Wilkes-Barre,	1.12	-3.83	0.46	5	21	6	5	SW	Henry H. Guide.
Williamsport,	1.88	-0.41	0.47	6	24	7	5	SW	Mrs. L. H. Grenewald.
York,	1.18	-3.69	0.38	8	13	7	5	SW	.....

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

*On other dates also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

JUNE, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 29.93 inches, is .06 below the normal. At the United States Weather Bureau stations the highest observed was 30.36 inches, at Scranton and Philadelphia, on the 5th, and the lowest, 29.60 inches, at Philadelphia, on the 12th, and at Scranton on the 21st.

Temperature.

The means of the daily maximum and minimum temperatures, 73.4 degrees and 53.6 degrees, respectively, gave a monthly mean of 63.5 degrees, which is 5.1 degrees below the normal, and is 2.5 degrees below the corresponding month of 1902.

The average daily range was 19.8 degrees.

The highest monthly mean was 68.0 degrees, at York.

The lowest monthly mean was 59.0 degrees, at Coudersport.

The highest temperature recorded during the month was 90 degrees, on the 7th, at York.

The lowest temperature was 34 degrees, on the 1st, at Dushore.

The greatest local monthly range was 50 degrees, at Lawrenceville and Athens.

The least local monthly range was 31 degrees, at Erie.

The greatest daily range was 47 degrees, at Hawthorn and Milford.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 6.53, is 2.72 above the normal.

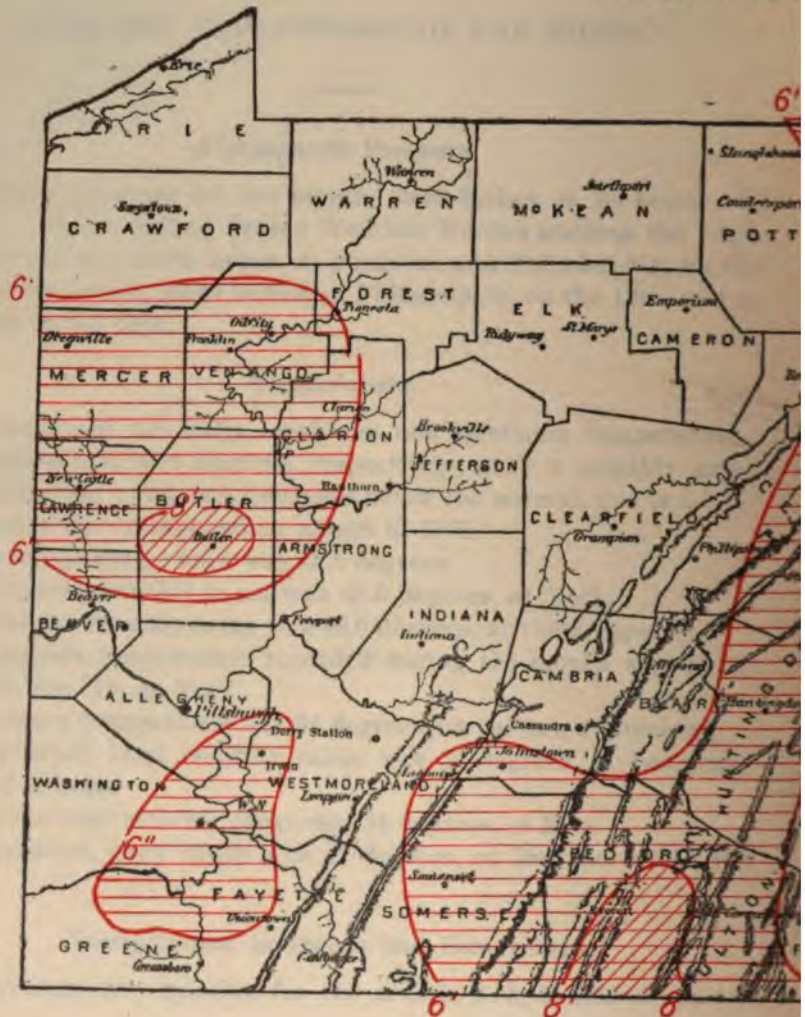
The largest totals of rainfall were: South Bethlehem, 11.76; Milford, 11.33; Trout Run, 9.73; Butler, 9.29; Quakertown, 9.23; Easton, 9.15. The least were: Confluence, 3.74; Warren, 4.28; Altoona, 4.34; Herrs Island Dam, 4.48; Erie, 4.49; Coudersport, 4.50.

Wind and Weather.

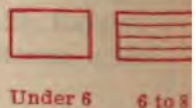
The prevailing wind was from the west.

Average number of rainy days, 15; clear, 7; partly cloudy, 10; cloudy, 13.

TOTAL PREC



SCALE



ON, JUNE, 1903.



DES—Inches.



Over 10

Climatological Data for Pennsylvania, June, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Date.	Lowest.	Date.	Greatest daily range.
				Mean.	Departure from the normal.	Highest.						
Kennett Square,	Chester,	275	14	64.7	-5.3	81	4	47	1	30	1	30
Lawrenceville,	Tioga,	1,006	5	62.4	-3.4	88	30	38	1	46	1	46
Lebanon,	Lebanon,	453	16	65.8	-3.8	89	4	44	1	40	1	40
Le Roy,	Bradford,	1,400	16	60.6	-6.0	82	9	42	1	29	1	29
Lewisburg,	Union,	430	32	64.8	-4.5	85	3	42	1	36	1	36
Lock Haven,	Clinton,	680	16	63.4	-5.1	83	3	42	1	30	1	30
Lynchburg,	Westmoreland,	1,420	11	63.0	-5.1	85	30	44	18	40	18	40
Marion,	Franklin,	550	14	65.0	-3.9	87	4	40	1	43	1	43
Marsh Creek,	Carbon,	550	14	65.0	-3.9	87	4	40	1	43	1	43
Mill Creek,	Juniata,	117	32	65.8	-5.9	84	30	39	1	47	1	47
Millport,	Pike,	117	32	65.8	-5.9	84	30	39	1	47	1	47
Philadelphia,	Philadelphia,	120	13	68.2	-6.3	84	3	51	1	27	1	27
Penn. Centennial Ave.,	Philadelphia,	642	33	65.8	-5.8	85	9	48	13	26	13	26
Pittsburg,	Allegheny,	536	1	59.2	.....	79	29	29	1	26	1	26
Piedmont Lake a.,	Monroe,	280	29	66.1	-3.2	86	3	42	1	40	1	40
Quakertown,	Bucks,	280	29	66.1	-3.2	86	3	42	1	40	1	40
Reading,	Berks,	672	5	66.2	-4.9	86	3	50	13	31	13	31
Renovo,	Clinton,	1,200	12	61.0	-4.9	89	6	40	13	43	6	43
Sagertown,	Crawford,	1,740	5	63.9	-3.5	89	4	40	13	43	4	43
St. Mary's,	Elk,	1,740	5	63.9	-3.5	89	4	40	13	43	4	43
Scranton,	Lackawanna,	465	15	68.2	-1.8	85	4	45	13	36	13	36
Shenandoah,	Schenectady,	465	15	68.2	-1.8	85	4	45	13	36	13	36
Shick,	McKean,	1,500	14	69.5	-6.5	82	9	36	18	33	9	33
Shick,	Shick,	2,250	47	69.5	-6.5	82	9	36	18	33	9	33
South Bethlehem,	Somerset,	2,339	12	62.2	-4.9	84	30	42	1	34	30	34
South Easton,	Northampton,	680	14	62.2	-4.9	84	30	42	1	37	30	37
State College,	Wyoming,	1,191	16	61.6	-6.0	83	20	43	18	31	20	31
Swatmore,	Center,	1,191	16	61.6	-6.0	83	20	43	18	31	20	31
Towanda,	Delaware,	754	8	62.0	-1.8	84	20	48	1	36	20	36
	Bradford,	754	8	62.0	-1.8	84	20	48	1	36	20	36

Unlontown,	59.9	16	66.6	-4.4	86	9	48	13	26
Warren,	1.137	14	62.0	-2.5	85	30	42	1	38
Weilsboro,	1.327	25	61.6	-2.8	85	30	38	1	40
West Chester,	455	49	65.4	-4.1	85	4	48	1	29
Wilkes-Barre,	575	19	61.8	-8.5	87	9	46	1	38
Williamsport,	530	74	64.4	-4.6	83	3	46	1	34
Lycoming,	585	16	68.0	-2.2	80	7	47	2	32
York,									

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.

A roman letter following the name of a station, or placed against the data, in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

Climatological Data for Pennsylvania, June, 1903—Continued.

Stations.	Counties.	Precipitation, in Inches.				Sky.			Prevailing direction of wind.	Observers.
		Total.	Departure from normal.	Greatest in 24 hours.	Total (un-melted.)	Number rainy days.	Number clear days.	Number partly cloudy days.		
Alleppo,	Greene,	5.78	.....	1.18	.....	12	7	14	SE	J. S. Hinerman.
Altoona,	Blair,	4.34	+0.40	1.20	.....	12	8	15	SW	Dr. C. B. Dudley.
Athens,	Bradford,	5.43	+1.88	1.04	.....	17	4	7	SW	F. L. Estabrook.
Belleville,	Center,	7.44	.....	1.76	.....	16	10	8	W	Fred. Kurtz.
Butler,	Washington,	9.29	.....	2.86	.....	18	10	10	W	W. L. Allen & Son.
California,	Butler,	5.70	.....	0.88	.....	18	10	10	W	H. W. Harmon.
Cassandra,	Cambria,	5.59	.....	0.88	.....	14	2	14	SW	A. H. Boyle.
Center Hall,	Center,	7.59	+1.31	1.28	T.	14	8	11	SW	S. W. Smith.
Coatesville,	Chester,	5.80	+3.16	0.91	.....	14	6	13	SW	W. T. Gordon.
Coudersport,	Potter,	4.59	+2.54	0.89	.....	12	3	10	SW	C. H. Armstrong.
Derry Station,	Westmoreland,	5.94	+0.49	1.11	.....	14	15	4	SW	D. H. Wyneman.
Dushore,	Sullivan,	5.84	+1.28	1.22	.....	12	9	1	SW	C. E. Monahan.
Dyersburg,	Warren,	9.15	+5.59	.....	.....	16	8	13	.....	Theodore D. Moore.
Emporium,	Northampton,	5.14	+0.81	1.29	.....	16	8	12	W	T. B. Lloyd.
Ephrata,	Cameron,	5.44	.....	0.82	.....	13	10	10	SE	W. L. Frantz.
Erie,	Lancaster,	4.49	+0.56	1.13	.....	16	13	7	SW	U. S. Weather Bureau.
Franklin,	Bedford,	5.67	+3.52	3.19	.....	15	2	26	SW	B. L. Steckman.
Freeport a,	Venango,	7.65	+2.50	2.20	.....	9	9	1	SW	Venango Water Co.
Gettysburg,	Adams,	4.49	+0.67	1.74	.....	14	10	9	W	Mrs. Anna R. Bartner.
Grampian,	Clearfield,	6.47	.....	3.47	.....	12	2	16	SW	Col. E. B. Cope.
Greenville,	Mercer,	4.48	+0.69	1.60	.....	11	12	14	W	R. P. Kester.
Hamburg,	Berks,	7.21	.....	1.34	.....	18	13	7	W	A. M. Orr.
Hamilton,	Wayne,	4.95	+1.62	0.92	.....	13	8	1	SW	Chas. H. Hummel.
Harrisburg,	Dauphin,	9.07	+5.40	2.63	.....	18	8	1	SW	H. F. Nicholson.
Hawthorn,	Clarion,	5.63	+1.37	1.54	.....	17	2	9	E	U. S. Weather Bureau.
Huntingdon,	Huntingdon,	6.32	+1.94	1.43	.....	14	11	11	W	J. M. Yeary.
Indiana a,	Indiana,	6.32	.....	1.08	.....	15	5	15	NW	Prof. W. J. Swigart.
Irwin,	Westmoreland,	6.66	+3.22	1.40	.....	15	8	7	NW	C. B. Robertson.
Johnstown,	Cambria,	7.69	+2.74	2.08	.....	17	2	4	.....	J. B. Gallagher.
						17	1	17	NW	E. C. Lorents.

Kennett Square.	Chester.	8.12	+4.66	3.40	13	2	11	17	SE	R. A. Hunter.
Lawrenceville.	Thioga.	8.60	+5.18	1.75	19	9	10	11	SE	C. P. Darling.
Lebanon.	Lebanon.	6.8	+3.11	1.23	17	6	6	18	SE	G. W. Hayes, C. E.
Bradford.	Bradford.	5.13	+1.01	1.43	19	7	4	19	NE	G. W. T. Warburton.
Le Roy.	Union.	8.02	+3.97	1.29	19	9	4	17	W	Prof. W. G. Owen.
Lock Haven.	Clinton.	7.44	+3.28	1.12	18	6	9	15	W	Prof. J. A. Robb.
Lyippus.	Westmoreland.	4.36	+0.81	0.78	15					Mrs. Forbes.
Mauch Chunk.	Franklin.	7.90	+4.15	2.27	12	13	15	10		C. H. McGermute.
Mifflintown.	Carlisle.	5.74		1.23	12	7	10	13	W	F. C. Wilermute.
Milford.	Junata.	11.33		4.73	19	10	10	13	W	Wellington Smith.
Philadelphia.	Pike.	5.48	-2.35	2.08	12	3	7	20	SE	Mrs. Alla Doughty.
1529 Centennial Ave.	Philadelphia.	5.91	+2.61	1.96	16	5	7	18	SE	U. S. Weather Bureau.
Pittsburg.	Allegheny.	5.27	+1.80	0.91	15	5	15	11	NW	John Comly.
Pocono Lake a.	Monroe.			1.90					W	U. S. Weather Bureau.
Quakertown.	Bucks.	9.23	+5.91	2.44	16	5	13	12	SW	Pocono Lake Ice Co.
Reading.	Berks.	6.20	+2.92	1.53	16					J. L. Heacock.
Renovo.	Clinton.									Franklin Yager.
Saegertown.	Crawford.	4.85	+0.67	1.25	17	9	8	13	NW	Fred. C. Eyster.
St. Marys e.	Elk.	4.90	+0.18	1.35	12	4	15	6		J. G. Apple.
Scranton.	Lackawanna.	7.73		1.92	16	6	6	19	NE	Wm. E. Wittman.
Schaghtico.	Snyder.	7.57	+3.34	1.69	18	0	14	16	SE	U. S. Weather Bureau.
Smithport.	Adams.									J. M. Boyer, C. E.
Somerset.	Somerset.	7.26	+3.45	1.53	17	8	18	12	SW	Amstrong & Brownell.
South Bethlehem.	Northampton.	11.78	+7.04	3.63	14	10	8	16	SW	W. M. Schrock.
State College.	Wyoming.	6.74	+3.33	2.16	14	10	8	16	SW	Prof. M. Merriman.
Swarthmore.	Center.	5.27	+3.06	1.20	16	5	9	12	SW	B. M. Hall.
Towanda.	Delaware.	5.05		2.00	12	0	18	12	SE	Prof. Wm. Frear.
Uniontown.	Bradford.	5.05	+1.54	1.06	18	7	8	15	E	Prof. S. J. Cunningham.
Warren.	Fayette.	6.03	-0.03	0.84	17	5	16	9	W	Hiram E. Bull, C. E.
Wellshoro.	Warren.	4.28	+1.46	1.00	14	3	23	4	NW	Wm. Hunt.
West Chester.	Thioga.	4.87	+0.08	0.55	18	8	13	9	W	James K. Simpson.
Wilkes-Barre.	Chester.	7.75	+3.78	2.17	17	5	6	19	S	H. D. Deming.
Williamsport.	Luzerne.	8.38	+4.37	2.18	15	9	1	20	S	J. C. Green, D. D. S.
York.	Lycoming.	5.49	+2.06	1.13	12	6	11	13	SE	A. W. Betterly, M. D.
	York.	6.21	+3.06	1.30	14	7	8	15		Henry H. Guise.
										Mrs. L. H. Grenewald.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained for a recent covering season or years. On other dates also.

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JULY, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 29.95 inches, is 0.5 below the normal. At the United States Weather Bureau stations the highest observed was 30.23 inches, at Erie and Pittsburg, on the 7th, and the lowest, 29.56 inches, at Erie and Pittsburg, on the 18th.

Temperature.

The means of the daily maximum and minimum temperatures, 82.4 degrees and 60.0 degrees, respectively, gave a monthly mean of 71.2 degrees, which is 0.9 degrees below the normal, and is 0.6 degrees below the corresponding month of 1902.

The average daily range was 22.4 degrees.

The highest monthly mean was 76.6 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 65.4 degrees, at Hamlington.

The highest temperature recorded during the month was 98 degrees, on the 9th, at Mauch Chunk, and on the 10th at Hamburg.

The lowest temperature was 35 degrees, on the 28th, at Dushore.

The greatest local monthly range was 59 degrees, at Coudersport.

The least local monthly range was 35 degrees, at Erie.

The greatest daily range was 46 degrees, at Huntingdon and Mauch Chunk.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 5.36, is 0.72 above the normal.

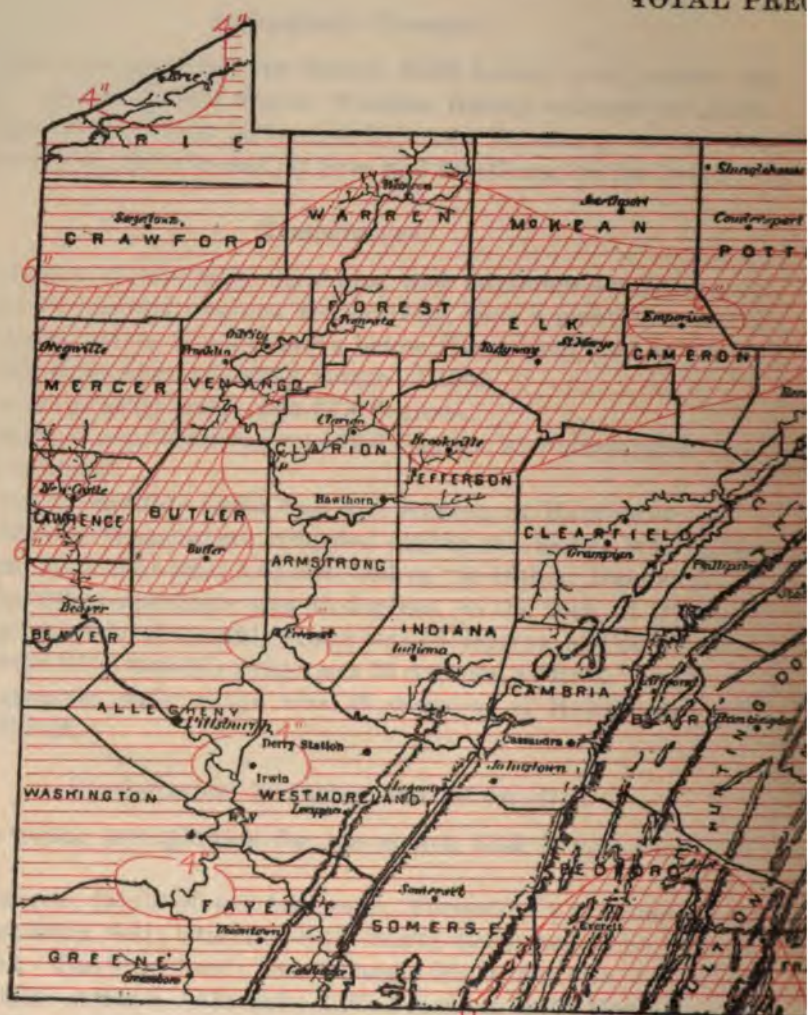
The largest totals of rainfall were: Pottsville, 8.81; Emporium, 8.42; Hamburg, 8.21; Ottsville, 8.11; South Bethlehem, 7.85; Greenville, 7.32. The least were: Harrisburg, 1.76; Mifflintown, 3.39; California, 3.56; Athens, 3.57; Erie, 3.57; Freeport, 3.65; Herrs Island Dam, 3.71.

Wind and Weather.

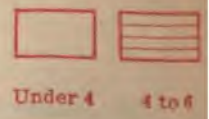
The prevailing wind was from the west.

Average number of rainy days, 12; clear, 13; partly cloudy, 12; cloudy, 6.

TOTAL PREC



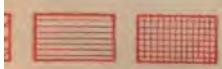
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ION, JULY, 1903.



ES—Inches.



Over 8

State College,	Center,	1,191	16	69.9	-0.9	89	*3	47	23	23
Swarthmore I,	Delaware,	125	13	74.0	.....	96	9	50	23	23
Towanda,	Bradford,	754	8	68.8	-2.8	91	*9	40	23	23
Uniontown,	Rayette,	999	16	72.7	-0.5	90	4	48	16	16
Warren,	Warren,	1,137	24	68.0	-0.2	91	8	44	23	23
Watsco,	Toga,	1,352	25	73.9	.....	84	9	52	23	23
West Chester,	Cheser,	855	49	73.6	+0.5	84	10	52	23	23
Wilkes-Barre,	Luzerne,	575	19	71.6	-1.0	95	10	42	23	23
Williamsport,	Lycoming,	530	14	71.5	-2.0	92	10	47	23	23
York,	York,	385	16	71.5	-2.0	92	10	47	23	23

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records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, and from a record covering at least ten years. *On other dates also. roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; instance, "n" denotes 14 days missing.

AUGUST, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 29.99 inches, is .03 of an inch below the normal. At the Weather Bureau stations the highest observed was 30.44 inches, at Scranton, on the 2d, and the lowest, 29.73 inches, at Erie and Philadelphia, on the 20th.

Temperature.

The means of the daily maximum and minimum temperatures, 77.2 degrees and 57.3 degrees, respectively, gave a monthly mean of 67.2 degrees, which was 2.9 degrees below the normal, and 0.6 degrees lower than during the corresponding period in 1902.

The average daily range was 19.9 degrees.

The highest monthly mean was 72.4 degrees, at California.

The lowest monthly mean was 60.0 degrees, at Pocono Lake.

The highest temperature recorded during the month was 99 degrees, on the 25th, at California.

The lowest temperature was 36 degrees, on the 8th, at Dushore.

The greatest local monthly range was 52 degrees, at Athens and Dushore.

The least local monthly range was 34 degrees, at Erie.

The greatest daily range was 42 degrees, at California.

Precipitation, in Inches and Hundredths.

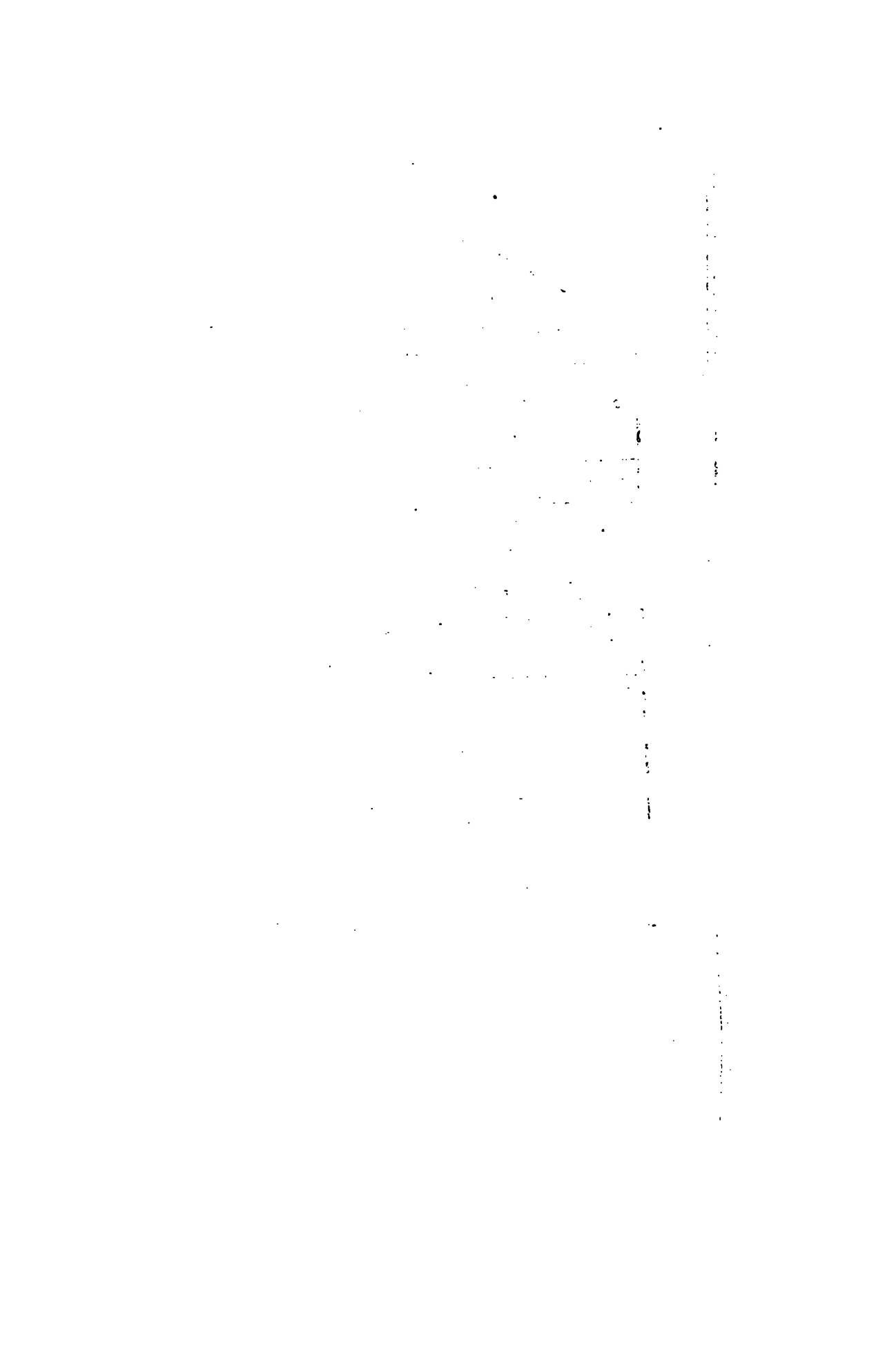
The average precipitation for the month, 5.29 inches, was 1.50 inches above the normal.

The largest totals of rainfall were: Saegerstown, 8.05; Hamlington, 7.85; Lebanon, 7.28; Johnstown, 7.21; Ephrata, 7.13; Wilkes-Barre, 7.13. The least were: Lock No. 4, 2.00; California, 2.36; Aleppo, 2.54; Confluence, 3.22; Uniontown, 3.25; Erie, 3.28.

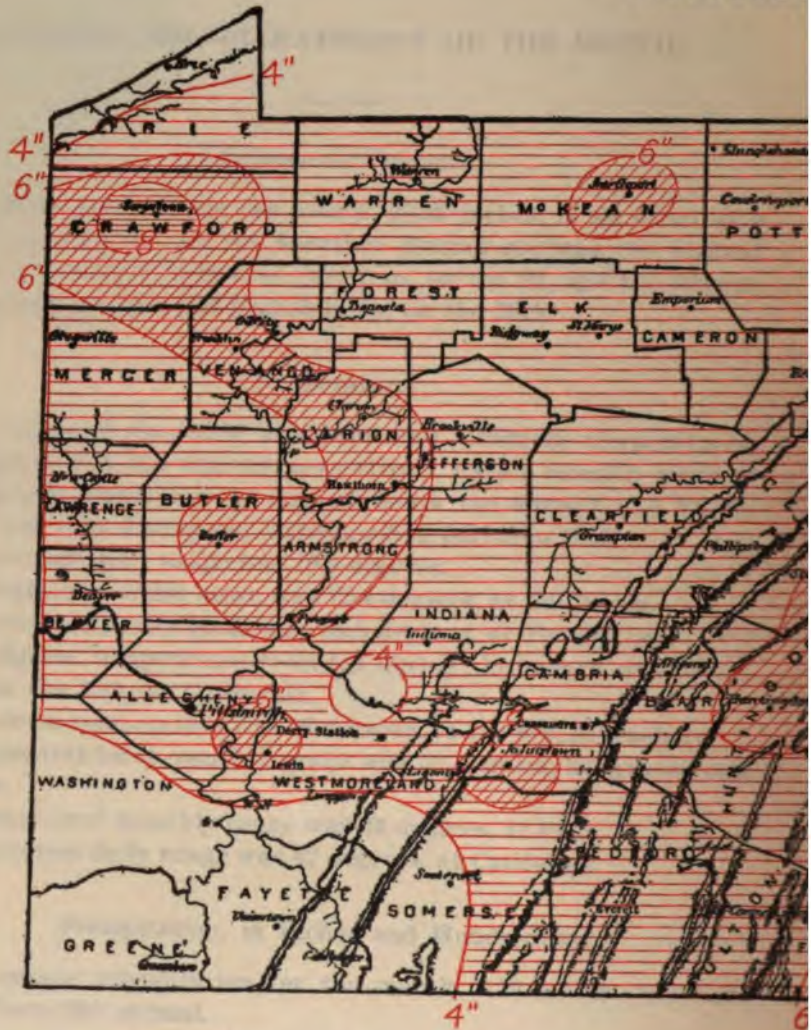
Wind and Weather.

The prevailing wind was from the west.

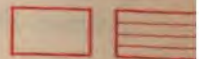
Average number of rainy days, 14; clear, 9; partly cloudy, 12; cloudy, 10.



TOTAL PREC



SCALE



Under 4 4 to 6

ION, AUGUST, 1903.



ES-Inches.



Over 8

Climatological Data for Pennsylvania, August, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.
Greene, f.	Greene	1,135	2	70.4	.....	94	25	43
Blair, f.	Blair	1,131	16	66.2	-4.2	91	25	41
Bradford, f.	Bradford	768	5	64.2	-5.5	93	25	37
Center, f.	Center	826	2	68.8	.....	a 91	25	35
Butler, f.	Butler	1,008	3	67.7	.....	89	24	46
Dauphin, f.	Dauphin	770	1	72.4	.....	99	24	42
Franklin, f.	Franklin	2,100	9	65.0	-3.4	85	24	48
Harrisburg, f.	Harrisburg	1,272	15	65.8	-4.0	90	24	40
Hawthorn, f.	Hawthorn	1,272	15	65.8	-4.0	90	25	43
Huntingdon, f.	Huntingdon	1,651	16	62.2	-2.7	97	25	48
Indiana, f.	Indiana	1,172	6	62.2	-2.3	92	25	43
Lycoming, f.	Lycoming	1,590	6	62.2	-4.0	88	25	36
Northampton, f.	Northampton	325	33	67.4	.....	90	25	47
Northumberland, f.	Northumberland	1,050	16	65.4	-3.3	87	25	44
Lancaster, f.	Lancaster	284	3	68.8	.....	92	25	47
Lebanon, f.	Lebanon	1,400	30	67.0	-2.5	85	19	51
Lebanon, f.	Lebanon	1,060	5	67.5	-2.3	92	24	49
Lebanon, f.	Lebanon	956	29	66.8	-2.7	88	25	42
Lebanon, f.	Lebanon	772	25	72.2	.....	94	24	46
Lebanon, f.	Lebanon	575	29	70.4	-1.0	94	23	50
Lebanon, f.	Lebanon	1,570	29	65.9	.....	89	25	42
Lebanon, f.	Lebanon	1,135	40	66.9	+0.5	91	25	40
Lebanon, f.	Lebanon	1,380	7	69.4	-4.3	91	25	46
Lebanon, f.	Lebanon	1,600	15	62.0	-5.5	87	25	43
Lebanon, f.	Lebanon	361	15	68.6	-3.5	93	25	53
Lebanon, f.	Lebanon	1,073	4	67.1	.....	91	25	44
Lebanon, f.	Lebanon	660	16	67.1	-4.0	94	24	45
Lebanon, f.	Lebanon	1,311	7	68.0	.....	90	25	44
Lebanon, f.	Lebanon	884	6	70.6	.....	94	24	43

State College,	Center,	1.191	16	66.4	-2.7	88	25	45	8	29
Swarthmore,	Delaware,	125	13	69.6	-3.5	94	25	49	8	28
Trenton,	Bradford,	784	8	64.4	-5.1	50	25	42	8	22
Uniontown,	Bayette,	189	16	71.4	-0.9	85	25	47	8	23
Warren,	Warren,	1.377	14	61.6	-1.3	86	25	42	8	24
Wellboro,	Tioga,	1.377	25	64.0	-1.3	86	25	44	8	23
West Chester,	Chester,	1.465	49	70.0	-1.9	93	25	52	8	20
Wilkes-Barre,	Luxerne,	575	19	66.2	-5.1	91	25	43	8	22
Williamsport,	Lycoming,	530	14	66.8	-3.6	91	25	47	8	22
York,	York,	385	16	69.6	-3.3	95	25	50	*1	27

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.
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Climatological Data for Pennsylvania, August, 1903—Continued:

Stations.	Counties.	Precipitation, in Inches.					Sky.	Prevailing direction of wind.	Observers.			
		Total.	Departure from normal.	Greatest in 24 hours.	Total snowfall (un-melted).	Number rainy days.				Number clear days.	Number partly cloudy days.	Number cloudy days.
Aleppo.	Greene,	3.54	+1.85	1.10	.....	6	16	14	1	SW	J. S. Hinerman.
Altoona, I.	Blair,	5.06	+1.72	1.61	.....	12	12	12	7	SW	Dr. C. B. Dudley.
Athens.	Bradford,	5.79	.....	.....	.....	10	12	12	12	SW	F. L. Estabrook.
Belleville.	Center,	5.50	.....	.....	.....	14	16	16	9	W	Fred. Kurtz.
Butler a.	Butler,	6.84	.....	.....	.....	11	16	16	11	W	W. L. Allen & Son.
California.	Washington,	2.28	.....	.....	.....	10	11	16	9	W	H. W. Harmon.
Cassadun.	Camden,	4.15	+0.80	0.74	.....	10	11	16	11	SW	W. L. Harmon.
Catsville.	Cheshire,	5.11	+0.80	0.74	.....	10	11	16	11	SW	W. L. Harmon.
Coatesville.	Chester,	4.84	+0.80	0.74	.....	10	11	16	11	SW	W. L. Harmon.
Coudersport.	Potter,	4.71	+0.80	0.74	.....	10	11	16	11	SW	W. L. Harmon.
Derry Station a.	Westmoreland,	5.19	+1.15	1.43	.....	12	12	6	13	W	C. H. Armstrong.
DuBois.	Sullivan,	5.23	+0.39	0.97	.....	16	11	7	13	SW	C. E. Molyneux.
Dyberry.	Wayne,	5.43	+0.78	1.97	.....	13	14	5	12	W	Theodore Day.
Easton.	Northampton,	5.92	+2.14	1.33	.....	15	14	14	8	W	T. B. Lloyd.
Emporium.	Camden,	7.13	.....	.....	.....	16	14	3	14	W	W. L. Frantz.
Esbrata.	Landaster,	3.23	-0.01	1.06	.....	11	9	14	8	N	U. S. Weather Bureau.
Everett.	Bedford,	4.72	-0.72	1.26	.....	10	12	7	12	SW	B. L. Stockman.
Franklin.	Franklin,	6.05	+3.42	1.79	.....	10	12	9	9	W	U. S. Weather Bureau.
Frederick.	Armstrong,	7.06	+3.53	2.05	.....	11	12	12	12	W	U. S. Weather Bureau.
Gordonburg.	Schuykill,	5.47	+3.83	2.13	.....	15	12	16	12	W	U. S. Weather Bureau.
Greenville.	Schuykill,	4.73	+0.92	1.19	.....	17	11	10	10	W	U. S. Weather Bureau.
Hamburg.	Mercer,	5.34	+1.97	2.60	.....	9	17	7	7	W	U. S. Weather Bureau.
Hamilton.	Berks,	7.85	+3.54	1.60	.....	15	17	7	7	W	U. S. Weather Bureau.
Harrisburg.	Wayne,	5.83	+1.60	1.49	.....	16	9	4	13	W	U. S. Weather Bureau.
Huntingdon.	Dauphin,	6.17	+1.51	2.25	.....	18	8	14	14	E	U. S. Weather Bureau.
Indiana.	Clarion,	6.43	+2.82	.....	.....	15	11	8	12	W	J. M. Yenny.
Westmoreland.	Huntingdon,	5.36	+3.51	1.67	.....	16	14	14	8	W	U. S. Weather Bureau.
	Westmoreland,	5.36	+3.51	1.67	.....	16	14	14	8	W	U. S. Weather Bureau.

Johnstown,	7.21	+2.95	2.21	14	4	21	6	S	E. C. Lorentz.
Kennett Square,	5.08	+0.28	2.39	12	11	16	8	NE	R. A. Hunter.
Lawrenceville,	5.31	+1.41	1.30	11	7	16	9	NE	C. P. Darling.
Lebanon,	7.28	+3.82	2.03	13	4	11	16	E	G. W. Hayes, C. E.
Le Roy,	4.40	+0.16	0.95	18	6	11	12	SW	G. W. T. Warburton.
Lewisburg,	6.21	+0.22	1.43	16	5	10	10	W	Prof. W. G. Owen.
Clinton,	6.21	+0.69	1.31	16	5	10	10	W	Prof. J. F. Robb.
Lock Haven,	3.75	+0.01	1.31	9	16	10	10	W	Mrs. J. F. Robb.
Marion,	6.02	1.37	1.37	14	11	9	11	NE	H. C. B. Bage.
Mauch Chunk,	5.29	+0.52	1.51	12	7	13	11	NE	F. C. Wintermute.
Mifflintown,	6.24	2.20	1.67	16	7	10	14	W	Wellington Smith.
Milford,	7.03	1.78	1.78	15	12	9	10	W	Mrs. Alia Doughty.
Montrose,	5.53	2.44	1.78	17	11	10	10	W	J. R. Beebe.
New Germantown,	5.57	+1.22	1.89	17	5	9	17	W	Ed. C. Johnston.
Philadelphia,	5.40	+1.79	1.85	17	8	9	14	SE	U. S. Weather Bureau.
1329 Centennial Ave.,	4.71	+1.53	2.07	13	10	16	5	SE	John Comly.
Pittsburg,	6.53	1.33	1.33	13	11	8	12	W	U. S. Weather Bureau.
Pocono Lake,	4.61	+0.30	2.30	15	4	16	11	W	Pocono Lake Ice Co.
Quakertown,	5.01	+0.13	1.39	19	11	16	11	SW	J. L. Headcock.
Reading,	5.01	+0.13	1.39	19	11	16	11	SW	Franklin Yager.
Reno,	5.01	+0.13	1.39	19	11	16	11	SW	Franklin Yager.
Scranton,	6.03	+0.92	1.20	17	3	14	14	NE	Fred. C. Eyster.
St. Marys,	6.03	+0.92	1.20	17	3	14	14	NE	Fred. C. Eyster.
Sellingrove,	6.14	+0.14	1.12	17	3	14	14	NE	Wm. E. Wittman.
Smythport,	6.14	+0.14	1.12	17	3	14	14	NE	Wm. E. Wittman.
Somers,	3.93	-0.42	1.20	18	9	8	14	N	J. M. Boyer, C. E.
Somers,	3.93	-0.42	1.20	18	9	8	14	N	A. Lincoln Gallup.
South Bethlehem,	4.88	+0.55	1.59	15	16	6	9	W	Prof. M. Merriman.
South Eaton,	6.19	+2.33	1.31	12	11	9	11	NW	B. M. Hall.
State College,	6.19	+2.33	1.31	12	11	9	11	NW	Prof. Wm. Frear.
Swarthmore,	6.85	+2.80	3.12	17	4	13	14	W	Prof. S. J. Cunningham.
Towanda,	7.54	+2.91	2.04	15	0	21	10	NW	Hiram E. Bull, C. E.
Towanda,	4.63	+0.91	1.22	19	7	12	12	SE	Wm. Hunt.
Uniontown,	3.25	-1.03	0.96	13	13	18	2	SW	James K. Simpson.
Warren,	4.46	+0.13	0.88	15	2	28	3	N	H. C. B. Bage.
Wellboro,	3.37	-0.66	0.88	15	2	28	3	N	H. C. B. Bage.
Wellsboro,	3.37	-0.66	0.88	15	2	28	3	N	H. C. B. Bage.
Wilkes-Barre,	7.19	+5.26	2.03	17	11	15	15	W	A. C. Green, D. S.
Williamsport,	5.05	+0.83	1.04	10	16	4	22	SE	Henry H. Gule, M. D.
York,	6.96	+2.84	1.90	15	11	13	8	W	Mrs. L. H. Grenewald.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a very covering list of years. On other stations also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

SEPTEMBER, 1908—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.14 inches, is .06 of an inch above the normal. At the Weather Bureau stations the highest observed was 30.47 inches, at Pittsburg, on the 19th, and the lowest, 29.66 inches, at Scranton, on the 17th.

Temperature.

The means of the daily maximum and temperatures, 75.5 degrees and 51.0 degrees, respectively, gave a monthly mean of 63.2 degrees, which was about normal, and 0.5 degrees higher than during the corresponding period in 1902.

The average daily range was 24.5 degrees.

The highest monthly mean was 67.8 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 57.2 degrees, at Pocono Lake.

The highest temperature recorded during the month was 94 degrees, on the 14th, at California, and Freeport, on the 12th.

The lowest temperature was 27 degrees, on the 30th, at Dushore.

The greatest local monthly range was 61 degrees, at Freeport.

The least local monthly range was 39 degrees, at Philadelphia.

The greatest daily range was 50 degrees, at Irwin.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 2.09 inches, was 1.49 inches below the normal.

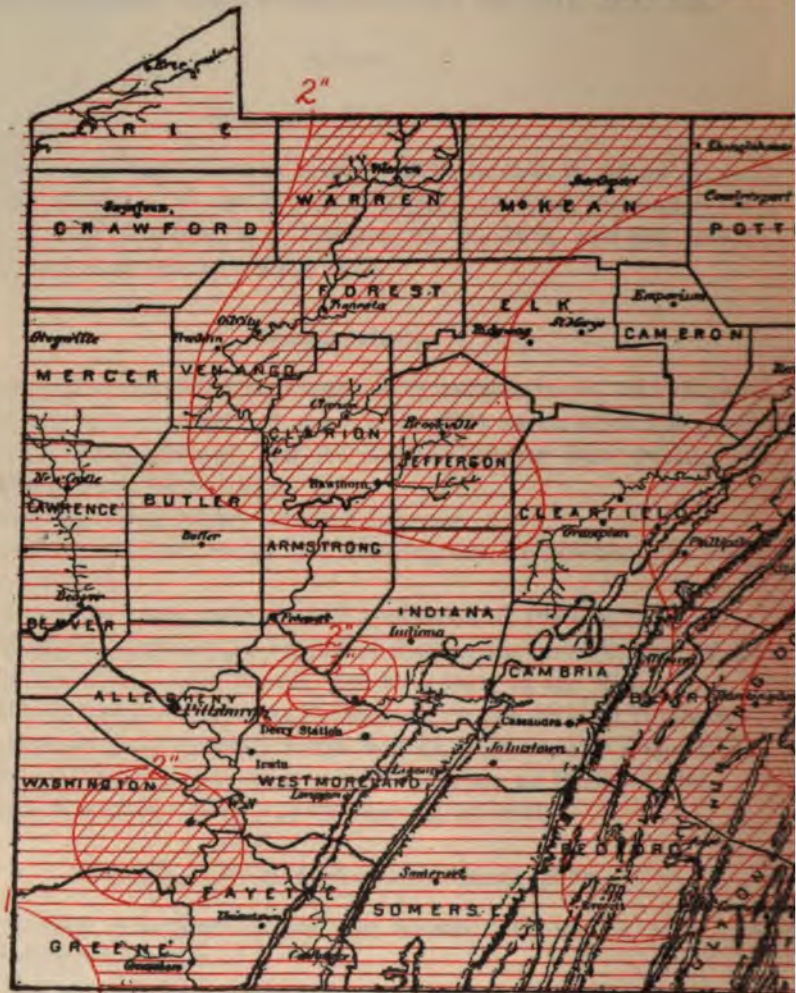
The largest totals of rainfall were: Saltsburg, 3.88; Forks of Neshaminy, 3.55; Philadelphia (Centennial Avenue), 3.49; New Germantown, 3.42; Smethport, 3.40; Doylestown, 3.33. The least were: Aleppo, 0.91; Pittsburg, 1.04; Elwood Junction, 1.06; Freeport, 1.08; Davis Island Dam, 1.10; Wellsboro, 1.10.

Wind and Weather.

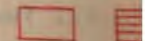
The prevailing wind was from the west.

Average number of rainy days, 6; clear, 17; partly cloudy, 8; cloudy, 5.

TOTAL PRECIP



SCALE OF



Under 1 1

, SEPTEMBER, 1903.



—Inches.

3 Over 3



Climatological Data for Pennsylvania, September, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.						
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.		
									Date.	Lowest.
Greatest daily range.										
Greene.	Greene.	1,135	2	64.6	—1.6	90	12	31	25	45
Blair.	Blair.	1,181	16	61.7	—1.6	87	14	30	39	41
Bradford.	Bradford.	768	5	62.0	—0.8	89	13	32	26	42
Center.	Center.	828	2	64.3	.....	87	13	32	28	40
Butler.	Butler.	1,008	2	63.6	.....	86	13	33	19	47
Washington.	Washington.	770	1	67.4	.....	94	14	33	23	40
Cambria.	Cambria.	2,700	1	63.7	—2.8	82	13	36	28	45
Center.	Center.	1,732	9	59.4	—2.9	89	14	34	23	43
Clearfield.	Clearfield.	1,272	5	63.7	+0.4	85	14	34	29	43
Chester.	Chester.	1,380	16	60.3	+0.4	90	15	36	30	43
Potter.	Potter.	1,661	16	58.7	.....	83	14	39	23	43
Westmoreland.	Westmoreland.	1,172	6	58.7	—2.0	83	12	23	19	46
Sullivan.	Sullivan.	1,580	6	53.0	—1.0	82	14	27	30	37
Wayne.	Wayne.	1,100	33	63.8	—1.4	84	15	36	30	35
Northampton.	Northampton.	325	20	59.7	—2.5	83	13	34	30	43
Cameron.	Cameron.	1,050	16	65.7	.....	92	13	35	28	46
Lancaster.	Lancaster.	384	3	65.7	.....	88	12	40	29	46
Erie.	Erie.	1,400	30	64.9	+1.3	88	11	31	28	39
Bedford.	Bedford.	1,060	5	63.2	+0.9	89	11	31	28	39
Verango.	Verango.	955	29	63.0	—0.3	88	11	31	28	39
Armstrong.	Armstrong.	772	25	66.9	.....	94	12	33	29	43
Adams.	Adams.	893	29	66.2	+2.4	90	13	33	29	43
Schuylkill.	Schuylkill.	593	40	60.6	—0.2	86	13	39	29	35
Chesapeake.	Chesapeake.	1,570	1	62.3	+2.0	88	13	39	29	43
Mercer.	Mercer.	1,185	7	62.3	.....	89	13	39	29	43
Berks.	Berks.	380	7	64.5	—1.7	83	14	32	30	44
Wayne.	Wayne.	1,600	15	59.2	—3.2	83	14	32	30	44
Harrisburg.	Harrisburg.	381	15	65.2	+0.8	87	16	41	30	46
Dauphin.	Dauphin.	1,073	4	63.4	.....	88	16	40	30	46
Clarion.	Clarion.	650	15	63.0	—1.3	87	13	33	29	43
Huntingdon.	Huntingdon.	1,311	7	63.2	.....	88	13	32	29	43
Indiana.	Indiana.	1,311	7	63.2	.....	88	13	32	29	43
Westmoreland.	Westmoreland.	884	6	65.4	.....	90	14	31	29	50

Climatological Data for Pennsylvania, September, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Greatest daily range.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	
Johnstown.....	Cambria.....	1,184	16	65.0	+0.1	92	14	82	42
Kennett Square.....	Chester.....	1,275	14	65.4	-0.7	84	13	37	31
Laurensville.....	Tioga.....	1,096	15	61.8	+1.0	90	13	30	42
Lebanon.....	Lebanon.....	1,458	16	65.1	0	88	13	35	38
Le Roy.....	Bradford.....	1,450	15	60.3	-1.6	84	13	33	36
Lewistown.....	Union.....	1,450	32	64.2	+1.6	89	16	34	39
Lock Haven.....	Clinton.....	560	16	65.2	+0.7	91	13	36	38
Lycippus.....	Westmoreland.....	1,450	11	63.6	-1.3	89	13	36	29
Marion.....	Franklin.....	1,640	.....	63.8	.....	86	15	35	32
Mauch Chunk.....	Carbon.....	560	14	63.7	-0.4	89	14	32	39
Mifflintown.....	Juniata.....	445	.....	61.8	.....	88	13	35	37
Montrose.....	Pike.....	455	.....	61.8	.....	89	14	31	39
New Germantown.....	Susquehanna.....	1,608	.....	60.6	.....	84	14	31	39
Philadelphia.....	Philadelphia.....	873	.....	62.6	.....	87	13	47	41
Pittsburg.....	Allegheny.....	130	12	67.8	+0.5	87	13	45	34
Pocomo Lake.....	Monroe.....	1,602	33	67.4	+0.7	90	12	42	34
Quakertown.....	Bucks.....	536	29	64.8	+1.1	78	13	32	37
Reading.....	Berks.....	280	30	65.5	-0.1	88	13	32	38
Renovo.....	Clinton.....	672	5	62.4	-1.0	86	14	37	37
Saegertown.....	Crawford.....	1,200	13	62.0	+0.3	88	14	28	45
St. Marys.....	Elk.....	1,740	5	57.9	-1.9	84	13	28	39
Scranton.....	Lackawanna.....	805	3	62.0	.....	87	14	34	30
Selinsgrove.....	Snyder.....	455	15	65.3	+1.0	89	11	37	38
Smithport.....	McKean.....	1,500	14	69.4	-0.7	85	14	28	36
Somerset.....	Somerset.....	2,250	47	61.4	-1.1	89	15	29	46
South Bethlehem.....	Northampton.....	339	12	62.2	+0.4	85	14	35	34
South Easton.....	Wilmington.....	690	14	61.4	-1.3	84	13	35	34
State College.....	Center.....	1,191	16	66.2	0	86	12	36	34
Swarthmore.....	Delaware.....	125	13	.....	.....	.....	.....	.....	.....

Towanda,	754	8	61.4	-1.1	87	14	31	30	41
Uniontown,	969	18	65.6	0	10	12	36	29	40
Warren,	1,137	14	61.5	-0.1	85	12	34	29	39
Wellboro,	1,327	25	61.4	+2.2	90	13	32	30	43
West Chester,	455	49	66.4	+1.5	87	13	41	29	23
Wilkesbarre,	576	19	61.2	-1.7	86	14	32	30	33
Williamsport,	530	14	63.3	-0.3	89	13	37	30	32
York,	385	16	66.4	+0.4	89	11	41	19	28

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.
 A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes *n* days missing.

Johnstown.	1.83	-1.63	0.71	6	17	10	3	S	E. C. Lorentz.
Kennett Square.	2.83	-2.12	1.15	7	18	9	3	SW	R. A. Hunter.
Lawrenceville.	3.39	-0.47	0.70	4	17	8	3	SW	C. W. Darling, C. E.
Lebanon.	1.56	-0.53	0.59	9	18	8	8	SW	G. W. R. Rayer, G. E.
Le Roy.	2.71	-1.53	0.78	7	22	4	4	W	Prof. W. G. Owead.
Lock Haven.	2.21	-1.07	0.78	8	23	4	4	W	Prof. J. A. Robb.
Lyons.	3.26	-0.37	1.20	7	20	5	5	W	Murray Forbes.
Lyttelton.	1.53	-1.40	0.83	5	20	5	5	W	Hon. C. B. Hege.
Marion.	1.52	.....	0.80	3	24	4	2	W	F. C. Wintermute.
Mauch Chunk.	1.90	-1.99	1.34	2	19	4	7	W	Wellington Smith.
Milltown.	2.35	.....	1.06	5	23	2	6	W	Mrs. Alla Doughty.
Millford.	1.25	.....	0.71	7	23	4	3	S	J. R. Beebe.
Montrose.	2.47	.....	1.78	4	24	4	2	SW	Ed. C. Johnston.
New Germantown.	3.42	.....	1.06	6	24	4	2	N	U. S. Weather Bureau.
Philadelphia.	2.31	-0.97	0.80	5	18	4	8	NW	John Comly.
Philadelphia, 183 Centennial Ave.,	3.49	-0.68	1.40	7	13	14	2	N	U. S. Weather Bureau.
Pittsburg.	1.04	-1.52	0.43	5	16	12	2	N	U. S. Weather Bureau.
Pennock Lake.	1.77	.....	0.83	5	20	12	2	W	Recon Lake Ice Co.
Quakertown.	2.84	-0.80	0.83	8	20	11	3	S	Franklin Yager.
Reading.	2.01	-0.49	2.30	6	11	15	3	S	Franklin Yager.
Renovo.	2.01	-1.20	0.92	4	21	4	5	S	J. G. Apple.
Saegertown.	1.68	-2.44	0.82	9	20	5	5	S	Wm. E. Wittman.
St. Marys.	1.43	-1.52	0.72	5	16	11	3	NE	U. S. Weather Bureau.
Scranton.	1.27	.....	0.72	4	15	9	6	SE	J. M. Boyer, C. E.
Sellingrove.	3.01	-0.47	1.27	5	0	23	7	S	A. Lincoln Gallup.
Smethport.	3.40	-0.15	0.98	9	19	6	5	NW	W. M. Schrock.
Somers.	1.30	-2.00	0.45	5	11	13	1	NW	Prof. M. Merriman.
Somers.	1.30	-2.00	0.45	5	11	13	1	NW	B. M. Hall.
South Bethlehem.	1.93	-0.83	1.32	5	17	6	7	NW	Prof. Wm. Frear.
South Eaton.	2.61	-0.21	1.12	8	18	8	4	W	Prof. S. J. Cunningham.
State College.	2.72	-1.46	1.00	7	17	23	7	NW	Wm. E. Bull, C. E.
Swatara.	1.24	-3.30	0.83	7	17	2	10	SW	Wm. E. Bull, C. E.
Uniontown.	2.33	-1.53	1.23	6	21	2	4	SW	Wm. E. Bull, C. E.
Warren.	2.33	-1.53	1.23	7	21	17	5	N	James K. Simpson.
Wellboro.	1.10	-1.50	0.40	6	12	11	7	N	H. D. Deming.
West Chester.	2.73	-1.50	1.12	7	21	4	5	S	J. C. Green, D. D. S.
Wilkesbarre.	2.16	-0.84	0.75	8	15	0	15	S	A. W. Betterly, M. D.
Williamsport.	1.43	-2.04	0.77	3	22	4	4	NW	Henry H. Gulse.
York.	2.72	-1.12	2.11	5	18	8	4	W	Mrs. L. H. Grenewald.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, based from a record covering at least ten years. *On other dates also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; stance, "n" denotes 14 days missing.

OCTOBER, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.07 inches, is .01 of an inch below the normal. At the Weather Bureau stations the highest observed was 30.46 inches, at Pittsburg, on the 27th, and the lowest, 29.56 inches, at Philadelphia, on the 17th.

Temperature.

The means of the daily maximum and minimum temperatures, 63.3 degrees and 43.4 degrees, respectively, gave a monthly mean of 53.4 degrees, which was 2.2 above the normal, and 0.3 degrees higher than during the corresponding period in 1902.

The average daily range was 19.9 degrees:

The highest monthly mean was 58.8 degrees, at York.

The lowest monthly mean was 47.6 degrees, at Pocono Lake.

The highest temperature recorded during the month was 91 degrees, on the 4th, at California.

The lowest temperature was 20 degrees, on the 25th, at Dushore.

The greatest local monthly range was 67 degrees, at Aleppo.

The least local monthly range was 44 degrees, at Philadelphia (Centennial Avenue), and State College.

The greatest daily range was 49 degrees, at Smethport.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 4.64 inches, was 1.24 inches above the normal.

The largest totals of rainfall were: Milford, 10.53; Point Pleasant, 9.70; Smith's Corners, 9.18; Hamburg, 8.42; Doylestown, 8.15; Ham-linton, 8.14. The least were: Beaver Dam, 2.07; Lycippus, 2.34; Parkers Landing, 2.48; Elwood Junction, 2.58; Harrisburg, 2.62; Confluence, 2.64.

Wind and Weather.

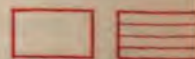
The prevailing wind was from the west.

Average number of rainy days, 9; clear, 12; partly cloudy, 8; cloudy, 11.

TOTAL PRECIPITATION



SCALE



Under 4 4 to 8

N, OCTOBER, 1903.



S-Inches.



8 to 10 Over 10

1

1

Climatological Data for Pennsylvania, October, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Date.	Lowest.	Date.	Highest.	Departure from the normal.	Greatest daily range.	
				Mean.	Mean.	Departure from the normal.	Highest.								
Greene,	Greene,	1,135	2	53.8	+0.3	89	4	22	25	36	40	49	53.8	+0.3	36
Blair,	Blair,	1,181	16	53.0	-0.8	77	17	23	29	35	39	80	53.0	-0.8	36
Bradford,	Bradford,	768	5	53.3	.....	80	17	23	29	35	39	80	53.3	.....	36
Center,	Center,	829	2	54.6	.....	77	17	23	29	35	39	81	54.6	.....	36
Butler,	Butler,	1,006	3	53.0	.....	81	4	20	27	35	39	81	53.0	.....	36
Washington,	Washington,	770	1	57.2	.....	91	4	20	27	35	39	91	57.2	.....	36
Cambria,	Cambria,	2,100	9	49.6	-0.7	74	4	20	27	35	39	74	49.6	-0.7	36
Center,	Center,	1,272	5	51.2	-0.5	75	1	23	29	35	39	75	51.2	-0.5	36
Chester,	Chester,	1,380	16	56.2	+3.2	84	2	23	29	35	39	84	56.2	+3.2	36
Pottsville,	Pottsville,	1,572	6	49.0	.....	81	4	23	29	35	39	81	49.0	.....	36
Westmoreland,	Westmoreland,	1,572	6	49.7	-0.3	81	4	23	29	35	39	81	49.7	-0.3	36
Sullivan,	Sullivan,	1,590	38	54.2	+1.5	76	2	23	29	35	39	76	54.2	+1.5	36
Wayne,	Wayne,	1,100	20	53.8	+1.8	77	17	23	29	35	39	77	53.8	+1.8	36
Northampton,	Northampton,	325	16	53.0	.....	80	17	23	29	35	39	80	53.0	.....	36
Cameron,	Cameron,	1,050	3	53.8	+1.6	80	17	23	29	35	39	80	53.8	+1.6	36
Lancaster,	Lancaster,	334	30	52.3	-0.3	79	1	27	33	39	41	79	52.3	-0.3	36
Erle,	Erle,	1,400	5	52.1	-1.9	80	4	27	33	39	41	80	52.1	-1.9	36
Bedford,	Bedford,	1,060	26	52.8	.....	87	4	27	33	39	41	87	52.8	.....	36
Venango,	Venango,	955	25	56.4	+5.3	81	1	27	33	39	41	81	56.4	+5.3	36
Armstrong,	Armstrong,	772	23	51.9	.....	78	1	27	33	39	41	78	51.9	.....	36
Adams,	Adams,	575	25	50.2	+2.2	81	4	27	33	39	41	81	50.2	+2.2	36
Schuylkill,	Schuylkill,	804	40	54.8	+3.5	82	4	27	33	39	41	82	54.8	+3.5	36
Clearfield,	Clearfield,	1,570	7	54.8	+3.5	82	4	27	33	39	41	82	54.8	+3.5	36
Berks,	Berks,	1,385	7	54.8	+3.5	82	4	27	33	39	41	82	54.8	+3.5	36
York,	York,	1,000	15	56.0	+8.5	86	7	27	33	39	41	86	56.0	+8.5	36
Dauphin,	Dauphin,	381	15	53.0	+1.7	83	4	27	33	39	41	83	53.0	+1.7	36
Carlisle,	Carlisle,	1,073	4	53.0	+1.7	83	4	27	33	39	41	83	53.0	+1.7	36
Hawthorn,	Hawthorn,	650	16	53.6	.....	84	4	27	33	39	41	84	53.6	.....	36
Huntingdon,	Huntingdon,	1,311	7	53.6	.....	84	4	27	33	39	41	84	53.6	.....	36
Indiana,	Indiana,	1,311	7	53.6	.....	84	4	27	33	39	41	84	53.6	.....	36
Westmoreland,	Westmoreland,	884	6	53.3	.....	89	4	27	33	39	41	89	53.3	.....	36

Climatological Data for Pennsylvania, October, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.
Johnstown,	Cambria,	1,184	16	55.0	+1.5	86	.....	28	.....
Kennett Square,	Chester,	275	14	55.8	+1.9	78	.....	30	.....
Lawrenceville,	Flora,	1,060	16	50.8	.....	76	.....	31	.....
Lebanon,	Lebanon,	1,408	16	56.1	+1.5	73	.....	31	.....
Le Roy,	Bedford,	1,439	32	54.0	+1.7	78	.....	30	.....
Lock Haven,	Union,	1,450	32	54.0	+1.7	78	.....	30	.....
Lytle,	Clinton,	500	11	54.4	+1.8	77	.....	30	.....
Marion,	Westmoreland,	1,420	11	54.6	-0.4	85	.....	30	.....
Mauch Chunk,	Franklin,	1,440	14	54.7	+3.4	79	.....	30	.....
Mifflintown,	Carbon,	550	14	54.3	.....	77	.....	30	.....
Montrose,	Junata,	445	.....	51.9	.....	70	.....	30	.....
New Germantown,	Pike,	1,658	.....	55.4	.....	72	.....	30	.....
Philadelphia,	Susquehanna,	573	32	57.8	+2.0	80	.....	30	.....
105 Centennial Ave.,	Perry,	117	13	58.1	+3.4	79	.....	30	.....
Pittsburg,	Philadelphia,	842	32	56.2	+1.5	88	.....	30	.....
Poccano Lake,	Allegheny,	1,063	1	55.6	.....	78	.....	30	.....
Quakertown,	Monroe,	280	30	55.9	+2.2	78	.....	30	.....
Ramoth,	Bucks,	672	5	51.1	-0.5	80	.....	30	.....
Rensselaer,	Berks,	1,290	12	49.6	-0.7	77	.....	30	.....
Saegertown,	Clinton,	1,740	5	50.5	.....	77	.....	30	.....
St. Marys,	Crawford,	905	3	56.6	+4.9	80	.....	30	.....
Sellingrove,	Lackawanna,	455	15	56.6	+4.9	80	.....	30	.....
Smithport,	Snyder,	1,500	14	49.2	-0.5	75	.....	30	.....
Somerset,	McKean,	2,550	47	50.0	+1.8	88	.....	30	.....
South Bethlehem,	Somerset,	339	12	52.1	+1.3	75	.....	30	.....
State College,	Northampton,	660	14	52.1	+1.3	75	.....	30	.....
Swarthmore,	Wyoming,	1,191	16	52.3	+1.7	73	.....	30	.....
	Center,	1,125	13	50.3	+2.4	80	.....	30	.....
	Delaware, .....						.....		.....

Towanda,	764	8	51.8	+0.9	75	1	23	25	33
Uniontown,	999	16	55.6	+1.1	90	4	27	25	33
Warren,	1,137	14	51.0	-1.3	77	6	27	25	35
Wesboro,	1,427	25	51.6	+2.9	71	3	27	25	35
West Chester,	575	49	56.6	+2.6	80	3	32	27	36
Williamsport,	576	13	53.3	+1.3	83	3	25	25	36
York,	530	13	54.9	+3.6	74	6	23	25	35
York,	385	16	53.3	+5.8	80	2	33	23	33

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.
 A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

Johnstown	3.89	+1.37	1.0	12	10	9	NW	E. C. Lorenz.
Cambria	6.14	+2.67	2.02	12	12	10	NW	R. A. Hunter.
Chester	5.10	+2.11	1.53	13	8	13	...	C. P. Daring.
Tioga	4.48	+0.71	1.45	8	12	9	SW	G. W. Hayes, C. E.
Lebanon	5.08	+1.76	1.39	14	9	20	SW	G. W. T. Warburton.
Le Roy	3.47	+0.28	1.40	10	10	11	S	Prof. W. G. Owen.
Lewisburg	3.76	+0.53	1.60	9	10	7	W	Murray Forbes.
Lock Haven	2.34	-0.10	1.11	T.	9	14		Prof. J. A. Robb.
Westmoreland	3.17	+2.68	1.37	8	5	13		Prof. J. A. Robb.
Franklin	6.26	+2.68	1.37	18	4	5	N	Hon. C. B. Hege.
Carbon	3.17	+2.68	1.37	18	4	5	N	F. C. Wintermute.
Mauch Chunk	3.65	+2.68	1.37	18	4	5	W	Wellington Smith.
Jimfintown	10.53	7.70	1.75	8	15	4	SE	Mrs. Alia Doughty.
Pike	6.20	7.70	1.75	8	15	4	NW	J. R. Beebe.
Susquehanna	4.12	2.53	1.48	10	8	10	W	Ed. C. Johnston.
Perry	4.12	2.53	1.48	10	8	10	W	U. S. Weather Bureau.
New Germantown	3.96	+0.96	2.06	9	11	11	N	John Conly.
Philadelphia	7.22	+3.93	4.33	8	12	9	N	U. S. Weather Bureau.
323 Centennial Ave.	2.88	+0.45	3.95	10	12	12	W	F. C. Wintermute.
Pittsburg	2.88	+0.45	3.95	10	12	12	W	U. S. Weather Bureau.
Allegheny	2.88	+0.45	3.95	10	12	12	W	F. C. Wintermute.
McKean	2.99	+0.07	0.99	9	14	9	N	J. L. Hancock.
Reading	4.44	+0.67	2.12	8	15	9	N	Franklin Yager.
Renovo	5.07	+2.73	1.58	17	10	15	N	Fred. C. Eyster.
Seegerstown	3.70	+0.83	1.34	8	9	14	...	Wm. E. Wittman.
St. Marys	6.42	+0.98	3.22	9	7	4	SW	U. S. Weather Bureau.
Scranton	3.72	+0.08	1.31	10	0	19	NW	J. M. Boyer, C. E.
Sellinggrove	3.11	-0.12	1.45	T.	7	14	N	A. Lincoln Gallup.
Smethport	2.99	+0.07	0.99	9	14	9	NW	W. M. Schrock.
Somerset	5.23	+1.87	1.75	8	9	15	NW	Prof. M. Merriman.
Northampton	3.51	+0.51	1.57	10	11	11	W	B. M. Hall.
Wyoming	5.78	+2.12	1.35	13	8	18	NW	Prof. Wm. Frear.
Center	4.98	+1.83	1.04	18	5	18	NW	Prof. S. J. Cunningham.
Delaware	2.82	-0.19	1.04	8	15	8	SW	Hiram E. Bull, C. E.
Bradford	3.68	+0.96	1.28	10	20	6	SW	Wm. Hunt.
Fayette	5.68	+2.15	1.96	7	13	11	NW	James K. Simpson.
Warren	6.08	+2.31	2.89	7	12	11	NW	T. C. Green D. S.
Tioga	4.88	+2.08	2.07	6	13	22	NW	A. W. Battery, M. D.
Chester	3.51	+0.40	1.30	3	14	9	W	Henry H. Gulise.
Lucasbarre	3.51	+0.40	1.30	3	14	9	W	Mrs. L. H. Grenewald.
Williamsport	3.51	+0.40	1.30	3	14	9	W	Mrs. L. H. Grenewald.
York	3.51	+0.40	1.30	3	14	9	W	Mrs. L. H. Grenewald.

records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals at least ten years.
*On other dates also.
†man letter following the name of a station, or placed against the data in the body of the form. Indicates the number of days missing from the record; "yes," "n" denotes 14 days missing.

NOVEMBER, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.10 inches, is .01 of an inch below the normal. At the Weather Bureau stations the highest observed was 30.74 inches, at Harrisburg and Scranton, on the 21st, and lowest, 29.52 inches, at Erie, on the 11th.

Temperature.

The means of the daily maximum and minimum temperatures, 47.0 degrees and 26.8 degrees, respectively, gave a monthly mean of 36.9 degrees, which was 3.3 below normal, and 10.4 degrees lower than during the corresponding period in 1902.

The average daily range was 20.2 degrees.

The highest monthly mean was 43.5 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 31.2 degrees, at Pocono Lake.

The highest temperature recorded during the month was 78 degrees, on the 4th, at York.

The lowest temperature was 0 degrees, on the 29th and 30th, at Saegerstown.

The greatest local monthly range was 72 degrees, at Saegerstown.

The least local monthly range was 49 degrees, at Erie.

The greatest daily range was 47 degrees, at Saegerstown.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 2.18 inches, was 1.37 inches below the normal.

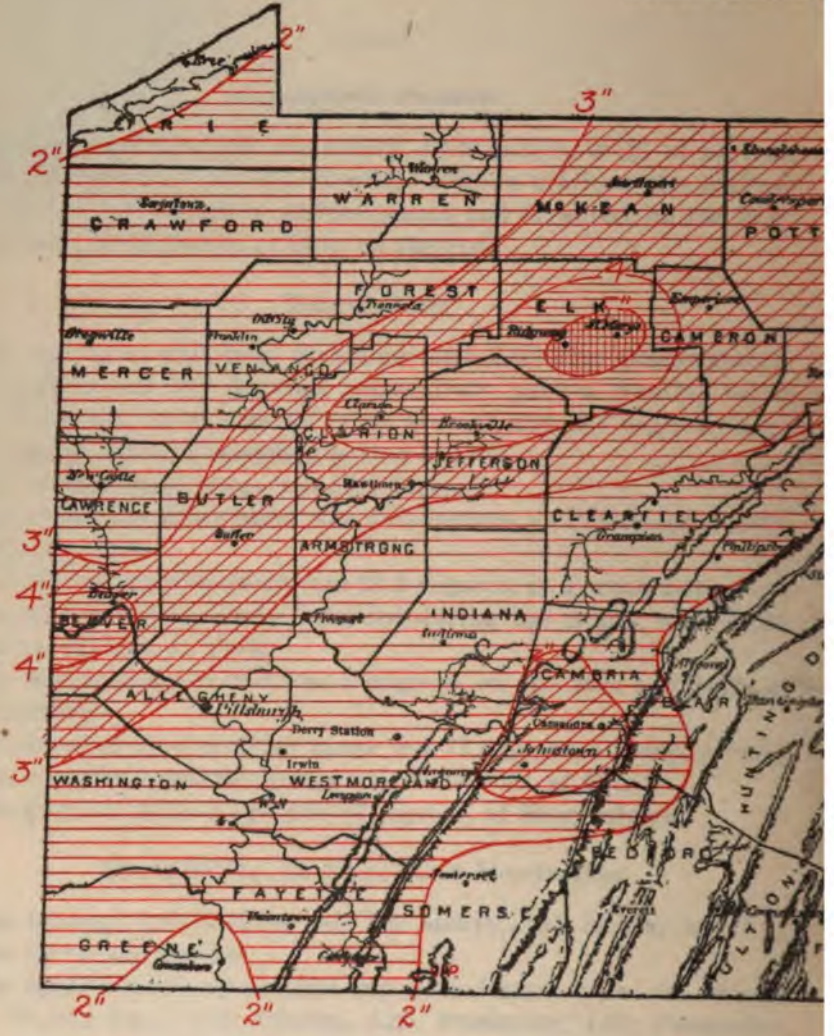
The largest totals of rainfall and melted snow were: St. Marys, 5.33; Beaver Dam, 4.46; Clarion, 4.12; Brookville, 4.06; Cassandra, 3.99; Coudersport and Parkers Landing, 3.94. The least were: Harrisburg, 0.88; Shawmont, 1.01; Philadelphia, 1.03; Gettysburg, 1.06; Forks of Neshaminy, 1.08; Brewers Lock, Kennet Square, and New Germantown, 1.17.

Wind and Weather.

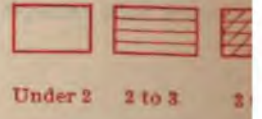
The prevailing wind was from the northwest.

Average number of rainy days, 7; clear, 11; partly cloudy, 8; cloudy, 11.

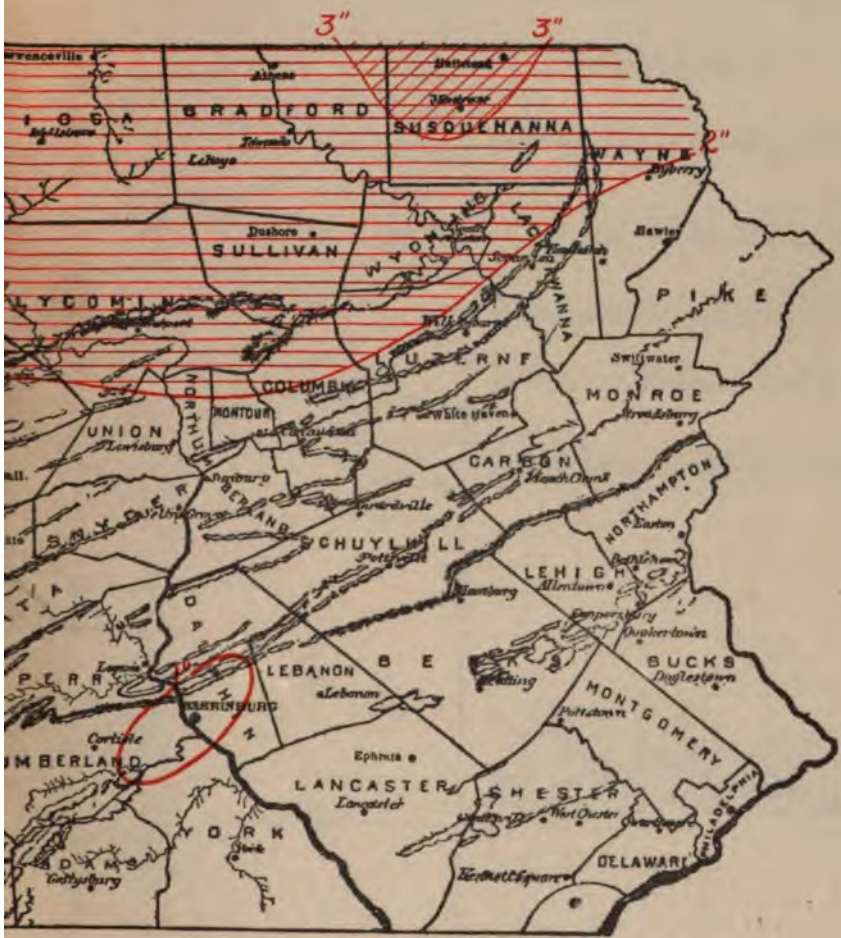
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SCALE OF SE



, NOVEMBER, 1903.



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Climatological Data for Pennsylvania, November, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.							
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.		
										Greatest daily range.	
Aleppo,	Greene,	1,135	2	36.6	.....	72	.....	7	.....	27	40
Altoona,	Blair,	1,181	16	36.9	-4.2	72	.....	10	21	23	42
Athens,	Bradford,	1,768	16	35.1	.....	71	.....	11	26	28	43
Bellefonte,	Center,	826	2	37.7	-3.9	67	.....	13	27	27	43
Butler,	Butler,	1,008	3	37.2	.....	75	.....	10	27	27	44
California,	Washington,	1,770	1	40.4	.....	67	.....	13	27	27	44
Cassandra,	Cambria,	2,100	9	33.1	-6.6	67	.....	10	28	28	44
Center Hall,	Center,	1,272	5	37.0	-3.4	69	.....	10	27	27	44
Coatesville,	Chester,	1,380	16	40.6	-2.4	66	.....	14	26	26	44
Coudersport,	Cotter,	1,451	32	32.2	.....	70	.....	5	27	27	44
Derry Station,	Westmoreland,	1,172	6	36.3	-6.2	67	.....	10	27	27	44
DuBois,	Sullivan,	1,590	6	32.0	-5.4	67	.....	6	30	30	49
Dyersburg,	Wayne,	1,100	33	39.8	-2.0	67	.....	17	25	25	47
Easton,	Northampton,	1,325	20	35.4	.....	67	.....	8	27	27	47
Emporium,	Caneron,	1,060	16	39.0	-4.6	72	.....	13	20	20	48
Ephrata,	Lancaster,	1,384	3	37.6	.....	67	.....	4	23	23	48
Erie,	Erie,	1,400	30	35.0	-5.4	70	.....	13	20	20	48
Everett,	Bedford,	1,060	5	35.0	-5.8	71	.....	9	27	27	48
Franklin,	Venango,	965	29	35.4	-5.8	71	.....	4	27	27	48
Freeport,	Armstrong,	772	25	36.9	.....	74	.....	3	11	27	43
Gettysburg,	Adams,	575	29	40.4	+0.3	71	.....	15	27	27	43
Gordon,	Schuylkill,	994	40	35.5	.....	70	.....	8	26	26	40
Gramplan,	Clearfield,	1,570	7	35.4	-3.4	70	.....	9	27	27	41
Greenville,	Mercoer,	960	7	38.2	.....	67	.....	12	26	26	44
Hamburg,	York,	1,000	11	38.2	-3.9	70	.....	17	27	27	44
Harrisburg,	Dauphin,	1,381	15	39.6	-2.8	73	.....	17	27	27	44
Hawthorn,	Clarion,	1,073	4	33.1	.....	68	.....	3	26	26	45
Huntingdon,	Huntingdon,	660	16	37.0	-5.1	76	.....	13	27	27	45
Indiana,	Indiana,	1,311	7	35.6	.....	73	.....	16	27	27	43
Irwin,	Westmoreland,	884	6	37.0	.....	73	.....	9	27	27	43



Climatological Data for Pennsylvania, November, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.
Johnstown.	Cambria,	1,284	16	37.6	-4.4	74	14	14	4
Kennett Square.	Chester,	1,275	14	40.9	-2.5	73	15	15	12
Lawrenceville.	Tioga,	1,000	5	33.7	-5.8	72	8	8	12
Lebanon.	Lebanon,	1,458	16	39.3	-3.3	73	13	13	12
Le Roy.	Bradford,	1,400	15	34.5	-3.3	69	9	9	25
Lewisburg.	Union,	1,450	32	37.5	-1.9	73	10	10	25
Lock Haven.	Clinton,	560	16	37.2	-4.3	74	9	9	25
Lycippus.	Westmoreland,	1,430	11	37.4	-5.3	68	4	4	25
Marion.	Franklin,	1,640	.....	37.9	-3.8	74	12	12	25
Mauch Chunk.	Carbon,	550	14	37.0	.....	71	12	12	25
Mifflintown.	Luniata,	445	.....	36.9	.....	70	12	12	25
Montrose.	Pike,	1,653	.....	33.4	.....	70	4	4	25
Montrose.	Susquehanna,	1,653	.....	38.6	.....	71	4	4	25
Montrose.	Perry,	1,117	32	42.3	-1.6	73	13	13	25
Philadelphia.	Philadelphia,	139	13	39.5	-3.0	73	19	19	25
1529 Centennial Ave.	Allegheny,	842	32	31.3	-1.7	69	4	4	25
Pittsburg.	Monroe,	1,662	1	31.4	-1.7	68	4	4	25
Pocono Lake.	Bucks,	1,536	23	39.4	-3.7	73	11	11	25
Quakertown.	Berks,	280	30	39.8	-5.0	71	14	14	25
Reading.	Clinton,	672	5	37.0	-4.8	71	10	10	25
Renovo.	Crawford,	1,200	12	34.5	-4.8	72	0	0	25
Saegertown.	Elk,	1,740	6	32.9	-4.9	68	4	4	25
St. Marys.	Lackawanna,	806	3	36.4	-2.7	70	11	11	25
Scranton.	Snyder,	463	14	39.2	-2.7	70	11	11	25
Selinsgrove.	Lawrence,	.....	.....	.....	-5.9	70	2	2	25
Skidmore.	McKean,	1,400	47	33.1	-5.9	71	7	7	25
Smithport.	Somerset,	2,300	12	.....	-4.1	68	10	10	25
South Bethlehem.	Northampton,	500	14	38.2	-4.1	68	10	10	25
South Easton.	Wyoming,	1,400	14	38.2	-4.1	68	10	10	25
State College.	Center,	1,151	16	39.0	-4.0	68	10	10	25

Swarthmore,	Delaware,	125	13	41.4	-2.1	73	4	13	26	23
Towanda,	Bradford,	754	8	35.0	-5.1	70	4	11	21	28
Uniontown,	Rayette,	989	16	37.7	-6.3	73	3	13	27	40
Warren,	Warren,	1,137	14	34.2	-7.3	68	4	7	29	28
Wellsboro,	Tioga,	1,327	25	26.0	-1.1	68	4	12	21	26
West Chester,	Chester,	1,455	49	40.8	-2.0	73	4	14	27	29
Wilkes-Barre,	Luzerne,	575	19	36.6	-3.9	67	3	12	26	30
Williamsport,	Lycoming,	530	14	27.6	-2.7	71	3	12	26	34
York,	York,	335	16	40.4	-2.3	73	4	15	27	44

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes n days missing.

Climatological Data for Pennsylvania, November, 1903—Continued.

Stations.	Counties.	Precipitation, in Inches.					Sky.			Prevailing direction of wind.	Observers.
		Total.	Departure from normal.	Greatest in 24 hours.	Total snowfall (un-melted.)	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.		
Allepo,	Greene,	2.03	.....	0.74	T.	7	14	3	15	SW	J. S. Hinerman.
Athens,	Blair,	1.53	-1.15	0.84	1.9	7	15	8	7	NW	Dr. C. B. Dudley.
Altoona,	Bradford,	2.49	-0.41	0.88	1.9	7	14	8	7	NW	F. L. Estabrook.
Belleville,	Center,	1.54	.....	1.15	0.1	6	14	3	13	W	Fred. Kurtz.
Butler,	Butler,	3.43	.....	1.21	0.4	8	16	0	17	W	W. L. Allen & Son.
California,	Washington,	2.08	.....	0.74	1.6	9	16	0	14	SW	H. W. Harmon.
Cassandra,	Cambria,	3.99	+0.84	1.35	2.0	8	6	13	17	NW	A. H. Boyle.
Center Hall,	Center,	1.28	+2.68	1.01	0.3	6	14	13	3	W	S. W. Smith.
Coatesville,	Columbia,	3.34	.....	1.28	1.28	6	14	13	3	W	C. H. Armstrong.
Coudersport,	Franklin,	2.72	-1.25	0.83	1.6	6	16	1	13	SW	D. M. Vineman.
Derry Station,	Sullivan,	2.28	-0.55	1.14	1.6	6	16	1	13	SW	C. E. Molyneux.
DuBois,	Wayne,	1.34	-2.16	0.1	0.1	4	12	7	11	.....	Theodore Day.
DuBois,	Northampton,	3.67	+0.46	1.80	2.0	7	19	3	8	W	T. B. Lloyd.
Emporium,	Cameron,	1.51	.....	0.80	T.	7	19	3	8	W	W. L. Frantz.
Ephrata,	Lancaster,	1.87	-2.25	0.73	0.7	14	6	2	23	S	U. S. Weather Bureau.
Erie,	Erie,	1.23	-0.93	0.47	T.	6	7	15	8	NW	B. L. Steckman.
Everett,	Bedford,	2.51	-0.53	1.09	T.	4	3	17	10	W	Venango Water Co.
Franklin,	Venango,	2.91	-0.49	1.07	3.0	11	9	7	14	NW	Mrs. Anna R. Burtner.
Freepport,	Armstrong,	1.06	-2.06	0.45	0.5	5	10	15	5	SW	Col. E. B. Cope.
Gettysburg,	Adams,	1.56	.....	1.02	T.	5	10	15	5	SW	Capt. J. G. Johnson.
Gordon,	Schuylkill,	2.75	-1.05	1.02	2.2	12	8	10	12	SW	R. J. Foster.
Grampian,	Clearfield,	1.49	-1.92	0.95	0.95	6	8	10	12	SW	A. M. Orr.
Greenville,	Mercer,	1.55	-1.97	0.94	0.94	6	8	10	12	SW	Chas. H. Hummel.
Hamburg,	Richmond,	0.88	-1.94	0.34	0.34	6	8	10	12	NW	H. F. Nicholson.
Harrisburg,	Wayne,	3.00	.....	1.40	2.0	8	11	7	13	NW	U. S. Weather Bureau.
Hawthorne,	Dauphin,	1.53	-1.01	0.64	1.5	7	11	7	13	W	J. M. Veary.
Huntingdon,	Clinton,	2.71	.....	0.95	2.6	11	14	8	8	W	Prof. W. J. Swigart.
Indiana,	Huntingdon,	2.64	-0.51	1.16	1.5	9	14	8	8	W	J. W. Wiggins.
Irwin,	Westmoreland,	2.64	-0.51	1.16	1.5	9	14	8	8	W	J. B. Gallagher.

DECEMBER, 1903—CLIMATOLOGY OF THE MONTH.

Atmospheric Pressure.

The mean pressure for the month, 30.05 inches, is .06 of an inch below the normal. At the Weather Bureau stations the highest observed was 30.62 inches, at Philadelphia, on the 19th, and the lowest, 29.30 inches, at Philadelphia, on the 9th.

Temperature.

The means of the daily maximum and minimum temperatures, 33.7 degrees and 17.0 degrees, respectively, gave a monthly mean of 25.4 degrees, which was 5.5 below normal, and 3.0 lower than during the corresponding period in 1902.

The average daily range was 16.7 degrees.

The highest monthly mean was 32.4 degrees, at Philadelphia (Centennial Avenue).

The lowest monthly mean was 19.1 degrees, at Smethport.

The highest temperature recorded during the month was 60 degrees, on the 12th, at Franklin.

The lowest temperature was—14 degrees, on the 29th of Saegertown, and on the 27th at Dushore.

The greatest local monthly range was 68 degree, at Franklin.

The least local monthly range was 34 degrees, at Harrisburg.

The greatest daily range was 46 degrees, at Derry Station.

Precipitation, in Inches and Hundredths.

The average precipitation for the month, 2.66 inches, was 0.59 inches below the normal.

The largest totals of rainfall and melted snow were Girardville, 4.83; Gordon, 4.78; Ottsville, 4.64; Seisholtzville, 4.52; Point Pleasant, 4.46; Kennett Square, 4.38. The least were: Davis Island Dam, 0.92; Greensboro, 1.12; Everett, 1.15; Elwood Junction, 1.33; Wellsboro, 1.35; Huntingdon, 1.40.

Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 9; clear, 8; partly cloudy, 9; cloudy, 14.

TOTAL PRECIP



SCALE



Under:

DECEMBER, 1903.



S-Inches.



3 to 4 Over 4



Climatological Data for Pennsylvania, December, 1903.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.					Date.	Lowest.	Date.	Highest.	Departure from the normal.	Mean.	Greatest daily range.
Aleppo,	Greene,	1,135	16	24.2	.....	50	.....	.....	28	7	.....	50	.....	24.2	40
Altosna,	Blair,	1,181	15	24.6	.....	49	.....	.....	28	1	.....	49	.....	24.6	35
Athens,	Bradford,	788	13	24.0	.....	44	.....	.....	19	8	.....	44	.....	24.0	35
Belleville,	Center,	826	13	26.8	.....	47	.....	.....	19	0	.....	47	.....	26.8	35
Bellfonte,	Center,	1,270	13	23.0	.....	43	.....	.....	14	0	.....	43	.....	23.0	35
Callensburg,	Washington,	1,760	13	23.0	.....	43	.....	.....	13	1	.....	43	.....	23.0	35
Cassandra,	Washington,	2,100	9	22.4	.....	43	.....	.....	13	1	.....	43	.....	22.4	35
Center Hall,	Cambria,	1,272	15	24.3	.....	43	.....	.....	25	1	.....	43	.....	24.3	35
Coatesville,	Center,	1,380	16	28.9	.....	50	.....	.....	20	9	.....	50	.....	28.9	35
Coudersport,	Chester,	1,661	16	19.3	.....	30	.....	.....	13	9	.....	30	.....	19.3	34
Derry Station,	Potter,	1,172	6	24.6	.....	52	.....	.....	12	1	.....	52	.....	24.6	34
Dushore,	Westmoreland,	1,590	6	21.6	.....	5.2	.....	.....	24	14	.....	5.2	.....	21.6	46
Easton,	Sullivan,	325	20	27.4	.....	51	.....	.....	20	5	.....	51	.....	27.4	38
Emporium,	Northampton,	1,030	16	24.2	.....	42	.....	.....	20	4	.....	42	.....	24.2	38
.....	Cameron,	284	3	27.6	.....	47	.....	.....	20	4	.....	47	.....	27.6	33
.....	Lancaster,	1,400	30	24.8	.....	49	.....	.....	12	5	.....	49	.....	24.8	31
.....	Erie,	1,060	3	25.2	.....	50	.....	.....	12	5	.....	50	.....	25.2	31
.....	Bedford,	275	22	24.9	.....	44	.....	.....	20	9	.....	44	.....	24.9	34
.....	Venango,	175	23	23.3	.....	44	.....	.....	20	9	.....	44	.....	23.3	36
.....	Armstrong,	175	23	23.3	.....	44	.....	.....	20	9	.....	44	.....	23.3	36
.....	Armstrong,	175	23	23.3	.....	44	.....	.....	20	9	.....	44	.....	23.3	36
.....	Schuylkill,	894	40	24.0	.....	45	.....	.....	20	9	.....	45	.....	24.0	42
.....	Chesterfield,	1,370	40	23.2	.....	49	.....	.....	12	7	.....	49	.....	23.2	43
.....	Merer,	950	7	26.2	.....	46	.....	.....	20	7	.....	46	.....	26.2	37
.....	Berks,	380	7	26.2	.....	46	.....	.....	20	7	.....	46	.....	26.2	37
.....	Dauphin,	361	15	28.3	.....	43	.....	.....	24	9	.....	43	.....	28.3	38
.....	Clarion,	1,073	4	27.2	.....	49	.....	.....	7	3	.....	49	.....	27.2	28
.....	Huntingdon,	630	16	27.2	.....	45	.....	.....	13	3	.....	45	.....	27.2	34
.....	Indiana,	1,311	7	25.6	.....	49	.....	.....	12	4	.....	49	.....	25.6	37
.....	Westmoreland,	884	16	26.4	.....	45	.....	.....	12	4	.....	45	.....	26.4	40
.....	Cambria,	1,184	16	29.4	.....	50	.....	.....	13	9	.....	50	.....	29.4	30
.....	Chester,	275	14	29.4	.....	50	.....	.....	13	9	.....	50	.....	29.4	38

Climatological Data for Pennsylvania, December, 1903—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in Degrees Fahrenheit.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.
Greatest daily range.						Date. <td>Lowest.</td>	Lowest.	
Lawrenceville.	Allegheny.	1,080	5	21.9	-6.1	42	Dec 20	11
Lebanon.	Lebanon.	1,483	16	27.2	-5.4	44	Dec 13	11
Le Roy.	Bradford.	1,460	15	21.6	-5.4	40	Dec 27	11
Lewistown.	Union.	1,460	32	25.8	-3.8	46	Dec 13	11
Lock Haven.	Clinton.	1,460	16	25.5	-6.2	44	Dec 29	11
Lycippus.	Westmoreland.	1,450	11	24.8	-7.8	44	Dec 27	11
Marion.	Franklin.	1,040	14	27.6	-5.8	44	Dec 12	11
Mauch Chunk.	Carbon.	1,550	14	25.3	-5.8	44	Dec 15	11
Mifflintown.	Juniata.	445	14	27.6	-5.8	44	Dec 12	11
Milford.	Pike.	455	14	27.6	-5.8	44	Dec 12	11
Monroeville.	Susquehanna.	1,253	14	27.6	-5.8	44	Dec 12	11
New Germantown.	Perry.	1,253	14	27.6	-5.8	44	Dec 12	11
Philadelphia.	Philadelphia.	1,253	14	27.6	-5.8	44	Dec 12	11
1529 Centennial Ave.	Philadelphia.	1,253	14	27.6	-5.8	44	Dec 12	11
Pittsburg.	Allegheny.	1,253	14	27.6	-5.8	44	Dec 12	11
Pennock.	Monroe.	1,253	14	27.6	-5.8	44	Dec 12	11
Pennock Lake.	Monroe.	1,253	14	27.6	-5.8	44	Dec 12	11
Quakertown.	Bucks.	1,253	14	27.6	-5.8	44	Dec 12	11
Reading.	Berks.	1,253	14	27.6	-5.8	44	Dec 12	11
Renovo.	Clinton.	1,253	14	27.6	-5.8	44	Dec 12	11
Sagerstown.	Crawford.	1,253	14	27.6	-5.8	44	Dec 12	11
St. Marys.	Elk.	1,253	14	27.6	-5.8	44	Dec 12	11
Scranton.	Lackawanna.	1,253	14	27.6	-5.8	44	Dec 12	11
Sellinggrove.	Snyder.	1,253	14	27.6	-5.8	44	Dec 12	11
Smithport.	Lawrence.	1,253	14	27.6	-5.8	44	Dec 12	11
South Bethlehem.	McKean.	1,253	14	27.6	-5.8	44	Dec 12	11
Southampton.	Somerset.	1,253	14	27.6	-5.8	44	Dec 12	11
State College.	Wyoming.	1,253	14	27.6	-5.8	44	Dec 12	11
State College.	Center.	1,253	14	27.6	-5.8	44	Dec 12	11
State College.	Delaware.	1,253	14	27.6	-5.8	44	Dec 12	11
State College.	Bradford.	1,253	14	27.6	-5.8	44	Dec 12	11
Uniontown.	Fayette.	1,253	14	27.6	-5.8	44	Dec 12	11

Warren,	1,137	14	22.0	-6.1	45	13	29	22
Wellsboro,	1,337	25	25.6	-3.6	45	93	27	28
West Chester,	455	49	29.4	-3.9	50	20	27	28
Wilkes-Barre,	575	19	26.2	-4.6	48	20	27	27
Williamsport,	530	14	26.6	-3.9	44	25	29	28
York,	385	16	29.2	-4.1	48	8	24	29

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals, obtained from a record covering at least ten years. *On other dates also.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

Climatological Data for Pennsylvania, December, 1903—Continued.

Stations.	Counties.	Precipitation, in Inches.				Sky.			Prevailing direction of wind.	Observer.
		Total.	Departure from normal.	Greatest in 24 hours.	Total snowfall (un-melted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	
Aleppo,	Greene,	2.18	.....	0.70	11.5	8	13	2	16	J. S. Hinerman.
Altoona,	Blair,	1.90	-1.06	0.64	9.0	9	9	.....	.....	Dr. C. E. Dudley.
Athens,	Bradford,	2.32	.....	0.59	9.0	6	.....	.....	.....	F. L. Estabrook.
Baileysville,	Center,	2.22	.....	0.58	15.0	10	10	.....	.....	F. L. Kutz.
Bellfonte,	Blair,	2.10	.....	0.53	15.0	12	10	4	17	W. L. Allen & Son.
California,	Washington,	1.43	.....	0.57	6.8	14	9	2	17	W. W. Harmon.
Cassandra,	Cambria,	2.71	-0.43	0.40	23.0	13	1	7	23	A. H. Boyle.
Center Hall,	Center,	1.84	-1.39	1.00	7.5	5	.....	.....	.....	S. W. Smith.
Coatesville,	Chester,	1.16	+0.18	1.57	10.9	10	15	9	7	W. T. Gordon.
Coudersport,	Potter, .....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Armstrong.
Derry Station,	Westmoreland,	1.63	-1.58	0.69	14.3	9	11	3	17	D. M. Whiteman.
Dushore,	Sullivan,	2.48	-0.63	0.97	20.6	11	6	8	17	C. E. Molyneux.
Easton,	Northampton,	3.62	-0.21	1.28	11.6	10	8	12	11	Prof. J. W. Moore.
Emporium,	Cameron,	2.88	-0.59	0.80	17.1	10	2	17	13	T. B. Lloyd.
Ephrata,	Lancaster,	2.70	.....	0.93	8.8	9	17	4	10	W. L. Frantz.
Erie,	Erie,	2.25	-0.97	0.48	.....	23	1	1	28	U. S. Weather Bureau.
Everett,	Bedford,	1.32	-0.21	0.26	11.6	2	18	15	0	E. L. Steckman, Co.
Franklin,	Franklin,	2.12	-0.38	0.16	11.4	10	.....	.....	.....	Rebango Water Co.
Frederick,	Armstrong,	2.55	-0.38	0.16	11.4	10	.....	.....	.....	Mrs. Anna R. Burnier.
Gettysburg,	Adams,	2.16	-1.14	1.60	13.5	7	15	11	5	Col. E. B. Cooper.
Greensburg,	Schickel,	2.78	.....	1.09	23.0	6	15	8	7	Cast. J. G. Johnson.
Grampian,	Clearfield, .....	.....	.....	.....	.....	.....	.....	.....	.....	R. P. Kester.
Greenville,	Mercer,	2.87	+0.31	0.77	15.8	17	4	8	19	A. M. Orr.
Hamburg,	Berks,	3.57	-0.31	1.53	0.6	5	.....	.....	.....	Chas. H. Hummel.
Harrisburg,	Dauphin,	1.82	-1.12	1.09	.....	9	9	17	5	U. S. Weather Bureau.
Hawthorn,	Clarion,	1.40	-1.53	0.67	7.0	6	8	11	13	J. M. Yeary.
Huntingdon,	Huntingdon, .....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. W. J. Swigart.
Indiana,	Indiana,	1.72	-1.46	0.78	4.0	8	0	7	29	J. W. Wiggins.
Irwin,	Westmoreland,	2.42	-1.21	0.72	10.8	15	3	15	13	J. B. Gallagher.
Johnstown,	Cambria,	E. C. Lorentz.
Kennett Square,	Chester,	4.28	-0.75	1.70	8.0	10	13	13	6	R. A. Hunter.



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